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West HiLine

Resource Management Plan
Environmental Impact Statement

FINAL

1988

United States Department of the Interior
Bureau of Land Management
Lewistown District, Montana

BLM-MT-ES-88-004-4410

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

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West HiLine

Resource Management Plan
Environmental Impact Statement

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Prepared By

United States Department of the Interior
Bureau of Land Management

Marvin LeNoue

State Director
Montana State Office

1988

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Dear Reader:

This proposed final West HiLine Resource Management Plan and Environmental Impact Statement is to be used in conjunction with the draft RMP/EIS issued in May, 1987. The draft analyzed four alternatives, including the preferred alternative, for managing 626,098 acres of public surface and 1,328,014 acres of subsurface minerals administered by the Bureau of Land Management through the Lewistown District Office. A limited number of the draft documents and accompanying maps are available at the Bureau of Land Management, Lewistown District Office, Airport Road, Lewistown, Montana 59457.

The comments and suggestions received during public review of the draft RMP/EIS did not require that the draft be rewritten. However, changes were made in the preferred alternative including: the addition of Middle Butte to the Sweet Grass Hills Area of Critical Environmental Concern; correction of the subsurface acreage figures presented in Tables 4.1, 4.2, 4.3 and 4.4; and clarification of material addressed throughout the draft. The "Using This Document" portion of this final shows the location of this clarified material; describes how various portions of the draft and this document complement each other; and directs the reader to several key areas depending on the level of review desired.

Two additional maps have been included in this proposed final. Figure 3.10 shows the number of claims per township in the entire West HiLine planning area and Figure 3.11 identifies potential areas of locatable minerals and claims in the Sweet Grass Hills.

To better describe the Bureau's oil and gas program, Appendix 1.3 has been added to this final. It describes the general operations involved in oil and gas activities; the history of oil and gas development; an overview of the current leasing program; the program's reasonably foreseeable development scenario; and the cumulative impacts of the development scenario.

The written comments received concerning the draft, along with a summary of oral comments provided during six public meetings, and the Bureau's responses to these comments are given in Chapter 5 of this document.

Any portion of this plan may be protested. Protests should be sent to the Director (760), Bureau of Land Management, U.S. Department of the Interior, 18th and C Streets NW, Washington, D.C. 20240, within the 30-day protest period, which ends July 30, 1988. Protest statements should include the following information:

The name, mailing address, telephone number and interest of the person filing the protest.

A statement of the issue or issues being protested.

A statement of the part or parts of the plan being protested.

A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party, or an indication of the date of the issue or issues that were discussed for the record.

A concise statement explaining why the proposed decision is believed to be wrong.

At the end of the 30-day protest period, the BLM may issue a Record of Decision, approving implementation of any portions of the proposed plan not under protest. Approval will be withheld on any portion of the plan under protest until the protest has been resolved. Any significant changes to the proposed plan, resulting from a protest, will be made available for public review and comment prior to final approval and implementation.

Following final approval of the plan a "desk document" consolidating and summarizing the management guidance developed through this planning project will be prepared for each participating resource area. This document will be designed for the everyday use by Bureau of Land Management employees while implementing the Resource Management Plan. A limited number of the desk documents will be available to the public upon request. Persons desiring a desk document may submit a written request to the Lewistown District BLM Office, Airport Road, Lewistown, Montana 59457.

We thank the individuals and organizations who participated in our planning process; helping us to prepare a plan that will lead to more effective and efficient management of public lands and minerals. Your interest is appreciated.

Sincerely,

State Director

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
LEWISTOWN DISTRICT OFFICE
LEWISTOWN, MONTANA

PROPOSED FINAL

WEST HILINE RESOURCE MANAGEMENT PLAN AND FINAL ENVIRONMENTAL IMPACT STATEMENT

This proposed final Resource Management Plan/Environmental Impact Statement addresses future management options for 626,098 surface acres and 1,328,014 subsurface acres in northcentral Montana. These lands are administered by the Bureau of Land Management through the Havre, Great Falls, Judith, and Phillips Resource Areas of the Lewistown District Office. Only small portions of the Judith and Phillips Resource Areas, related to management of the Upper Missouri National Wild and Scenic River, are addressed in this RMP/EIS.

The plan focuses on management options to resolve five issues: landownership adjustments; off-road vehicle designations; location of major rights-of-way; identification and management of emphasis areas; and recreational management of the Upper Missouri National Wild and Scenic River.

Four alternatives were developed to resolve these issues. The alternatives include Alternative A—continuation of existing management (No Action); Alternative B—emphasizing consumptive uses with minimum restrictions; Alternative C—emphasizing of protection and enhancement of non-consumptive uses and; Alternative D—the preferred alternative reflecting a balance of Alternatives A, B and C. Alternative D, as modified, plus the guidance given in the Management Common to All Alternatives section constitutes the proposed final plan.

The proposed plan identifies 15,689 acres of land for disposal and 34,428 acres for exchange or possibly sale; limits ORV use on 427,951 acres and closes 5 acres to ORV use; identifies 141,560 acres as avoidance areas and 63,357 acres as exclusion areas for major lineal rights-of-way; designates the Kevin Rim, Sweet Grass Hills and the Cow Creek areas as Areas of Critical Environmental Concern; and provides for future recreation management of the Upper Missouri National Wild and Scenic River, while mitigating impacts to natural and cultural resources.

The draft West HiLine Resource Management Plan (RMP) and Environmental Impact Statement (EIS) was released for a 90-day comment period in May, 1987. Based on the public comments received during that period, the draft's preferred alternative has been modified and selected as the proposed Resource Management Plan.

This proposed final RMP/EIS provides BLM's responses to those comments on the draft which include 172 letters received by mail; and 6 formal statements with 89 summary questions received at 6 public meetings. These comments include eight letters received shortly after the closing date for public comment on the draft. An additional 120 form letters were received in late November, 1987, but were not reprinted in this document because they were received 2½ months after the public review period closed. Analysis of the comments identified 196 questions which have been addressed in Chapter 5 of this proposed final.

Most of the public comments addressed management of the Sweet Grass Hills and mining activity in this area. In general, the comments and concerns received expressed opposition to mineral exploration and development in the Sweet Grass Hills. The additional 120 form letters received in November, 1987, were from Chester area residents, requesting that BLM allow mining in the Sweet Grass Hills. Mineral interests also opposed a management zone around the Kevin Rim and Sweet Grass Hills ACECs.

Other topics, in the descending order of comments received, include recreational management of the Upper Missouri National Wild and Scenic River; managing the other emphasis areas (Kevin Rim and Cow Creek); the land tenure adjustment issue; ORV management; and ROW location. Miscellaneous comments regarding the Management Common to All Alternatives section, given in Chapter 2 were also received.

Revisions to the draft's preferred alternative are identified below, by issue, and have been inserted at the appropriate locations throughout this proposed RMP.

Off-Road Vehicle Management

ORVs would be restricted to designated roads and trails versus existing roads and trails in ACECs and riparian areas.

Right-of-Way Location

ROWs, both transmission and distribution, off the east side of the Kevin Rim would be dependent on the results of a raptor habitat inventory. Windows would be identified in the ACEC activity plan.

Location of communication sites would not be permitted on the Middle and West Buttes of the Sweet Grass Hills.

Emphasis Areas

Middle Butte has been added to the Sweet Grass Hills ACEC. The management zones surrounding the Kevin Rim and Sweet Grass Hills ACECs have been dropped. The Rocky Mountain Front Raptor Guidelines would be used to implement a special raptor stipulation to the raptor habitat areas in and around the two ACECs. The allocation of ROW locations off the east side of the Kevin Rim has been deferred until completion of the ACEC activity plan and will be based on a raptor habitat inventory.

Summary

Program specific guidance, especially as it relates to locatable mineral development has been added to the implementation section for the Sweet Grass Hills.

Upper Missouri National Wild and Scenic River Management

The restriction limiting outfitting to 30% of the daily user capacity has been dropped.

This proposed West HiLine Resource Management Plan addresses future management options for 626,098 surface acres and 1,328,014 subsurface acres administered by the Bureau of Land Management (BLM). Most of this acreage is managed by the Havre and Great Falls Resource Areas. The remaining acreage is found in the Judith and Phillips Resource Areas, and is related to management of the Upper Missouri National Wild and Scenic River. All of these resource areas are administered by the Lewistown BLM District in north-central Montana.

PLANNING ISSUES

Five issues were identified through public comment, resource monitoring and policy mandates during the scoping process. These issues reflect concerns or conflicts which could be partially or totally resolved through this RMP.

Land Tenure Adjustment

The BLM manages a variety of public land in the West HiLine area, including land utilization project lands (lands which left federal ownership and were later acquired under the Bankhead-Jones Farm Tenant Act of July 22, 1934), public domain lands and mineral estate subsurface lands. Many of these lands are widely scattered and often pose multiple resource management problems. This RMP will identify public lands which should be retained, lands which may leave federal ownership and areas where BLM would like to acquire lands.

Off-Road Vehicle Management

Off-road vehicle use is increasing throughout the planning area and unauthorized roads and trails are extending into previously unroaded areas. Executive Order (EO) 11644, as amended by EO 11989, directs that all public lands be designated as open, limited, or closed to off-road vehicle (ORV) use. This plan will identify areas where there are resource conflicts, resource degradation or public safety concerns associated with ORV use and amend the designations if necessary.

Right-of-Way Location

This RMP will deal with ROW corridor planning by identifying avoidance areas, exclusion areas and windows for lineal rights-of-way. It will not identify corridors. The rationale for not designating corridors within the planning area is based on the landownership pattern, the existing facilities and the small amount of public land included in existing ROWs.

This RMP will also identify areas which are not suitable for communication site locations.

Emphasis Areas

Two areas in the Great Falls Resource Area and one in the Havre Resource Area need management emphasis to preserve particular resources.

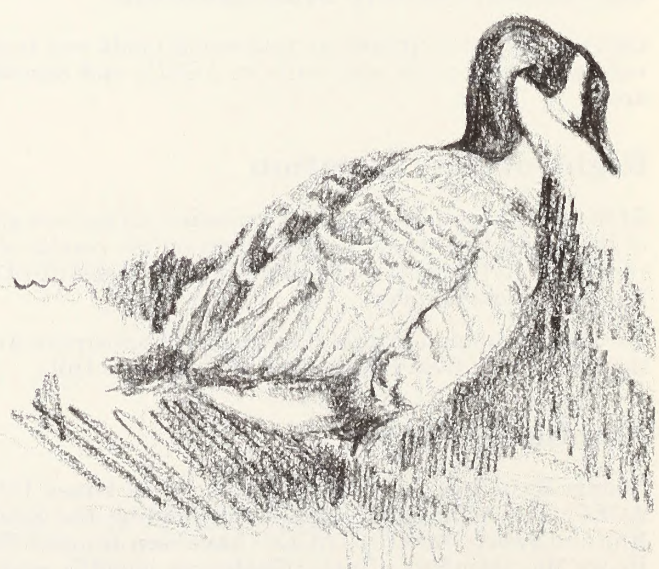
The Kevin Rim area is a high use area for a variety of raptors, is a potential peregrine falcon reintroduction area, and has significant cultural resources.

The Sweet Grass Hills are significant because: of their importance as a religious and cultural use area for Native Americans; they are an integral part of the peregrine falcon reintroduction effort; they contain high value recreational lands; and they support diverse wildlife populations.

The Cow Creek area contains a segment of the Nez Perce National Historic Trail, the Cow Island Trail and the Lewis and Clark National Historic Trail. It also includes portions of the Upper Missouri National Wild and Scenic River (UMNWSR) and the Cow Creek Wilderness Study Area (WSA).

Upper Missouri National Wild and Scenic River Management

The Upper Missouri National Wild and Scenic River (UMNWSR) was designated in 1976, and since that time there have been significant increases in recreational use of the river. This RMP affords BLM the opportunity to analyze the issue of increasing recreational expectations.



THE ALTERNATIVES

The formulation and analysis of alternatives is required by the Council on Environmental Quality, which oversees the National Environmental Policy Act (NEPA 40 CFR 1500.2(e)); and by the BLM to implement its resource planning regulations (43 CFR 1610.4-5). The goal of each alternative is to resolve the issues. Current management of non-issue resources and programs will continue under each alternative and is described in the Management Common to All Alternatives portion of Chapter 2. Each alternative, in conjunction with the Management Common to All Alternatives guidance, presents a complete and reasonable guide to future management of public lands and resources.

Several alternatives were considered during the formulation process, but were dropped from detailed study because they were unreasonable or did not adequately address the planning issues. These are described in Chapter 2.

Four alternatives were developed and analyzed in detail. The major management actions and environmental impacts of the four alternatives are discussed below. More information on the alternatives can be found in Chapter 2 and Tables 2.5 and 2.6 of this document.

Alternative D, as modified by public comments on the draft, has been selected as the proposed Resource Management Plan. It is the first alternative addressed in this summary.

Alternative D— The Proposed Alternative

Land Tenure Adjustment

BLM would consolidate land holdings in areas of high resource values. A total of 15,689 acres of public land would be identified for disposal through any means, with an emphasis on exchange. An additional 34,428 acres of land would be identified for disposal through exchange, however, if it is in the public interest and a parcel meets the specific criteria listed in Appendix 1.1, the parcel(s) may be disposed of through sale. This is a total of 50,117 acres identified for disposal through various means.

Retention and acquisition efforts would be concentrated in the Missouri and Marias River areas; the Cow Creek, Sweet Grass Hills, and Kevin Rim ACECs; and important wildlife habitat.

Impacts to vegetation would be moderate if a considerable amount of native range on disposed of tracts were plowed. Land disposal could impact 9,885 acres of crucial wildlife habitat if land uses change after disposal. The loss of this habitat could be offset by acquiring areas containing crucial wildlife habitat. Consolidation of public lands through exchange could enhance grazing management options however, these options would decrease if disposal was accomplished by sale. Recreation opportunities could significantly improve because of additional access and protection of recreational values resulting from land consolidation.

Off-Road Vehicle Management

The BLM would provide for the public use of off-road vehicles while protecting the resource values and providing for public safety. The BLM would limit off-road vehicle used to designated roads and trails in the UMNWSR Corridor, the Sweet Grass Hills, Cow Creek and Kevin Rim ACECs and in important riparian areas. Travel in WSAs would be limited to existing roads and vehicular ways.

ORV implementation plans will be developed and may include type of vehicle and seasonal restrictions, as well as road closures. The total acreage limited to ORV use would be 428,109 acres. Five acres along the lower Gist road would be closed to ORV use. The remainder of the planning area (197,984 acres), would be designated open to ORV use.

Positive benefits to soil and water resources may occur from restricting ORVs to roads and trails in areas of sedimentary breaks type soils (317,190 acres). Moderate positive impacts would be expected from the seasonal protection of essential wildlife habitat.

Right-of-Way Location

BLM would permit lineal rights-of-way, provided impacts can be mitigated in the majority of the planning area. Avoidance areas for lineal right-of-way location would total 141,718 acres and would include the scenic and recreational portions of the UMNWSR Corridor; WSAs; the Kevin Rim, Cow Creek and Sweet Grass Hills ACECs; riparian areas; and areas containing sedimentary breaks soils. Windows would be designated along existing facilities in the UMNWSR Corridor.

Following a raptor inventory and development of an activity plan, the Bureau would determine where ROW facilities (both transmission and distribution) could be located off the east side of Kevin Rim. The ACEC activity plan would

determine if any windows off the east rim should be designated, and if so, how many and where. Windows would not necessarily be established along existing facilities.

Lineal ROWs would be excluded on 63,357 acres in wild portions of the UMNWSR. Communication sites would not be permitted on the West and Middle Buttes of the Sweet Grass Hills.

Locally significant impacts could occur to sedimentary breaks type soils from increased runoff, erosion and sedimentation in the ROW windows through the UMNWSR Corridor. Impacts would occur from increased runoff, erosion and sedimentation if a ROW must be located in the avoidance area for sedimentary breaks type soil.

A locally moderate negative impact to the mineral and utilities industries would result from the increased costs of routing ROWs around avoidance and exclusion areas.

Emphasis Areas

The BLM would designate the Kevin Rim, the Sweet Grass Hills (East, Middle and West Buttes) and Cow Creek areas as Areas of Critical Environmental Concern.

The Kevin Rim would be designated to protect, maintain and/or enhance its raptor and cultural resources.

The Sweet Grass Hills are significant because of their religious importance to Native American tribes, important raptor habitat, important wildlife habitat and public recreation.

The Cow Creek area contains a segment of the Nez Perce National Historic Trail, the Lewis and Clark National Historic Trail and the Cow Island Trail.

Activity plans would be developed for all areas to detail specific actions needed to implement the guidance.

Management direction for Kevin Rim would apply the Rocky Mountain Front Raptor Guidelines (see Appendix 2.2) to new federal mineral leases within the associated raptor habitat. BLM would not authorize new developments within 1/4-mile of the base of the Kevin Rim escarpment, unless impacts to cultural resources could be mitigated; and BLM would determine where ROW facilities off the Kevin Rim escarpment (east side) could be located after completing a raptor inventory and an activity plan.

Management direction for the Sweet Grass Hills would include: consultation with Native American tribes prior to surface disturbing activities; applying the Rocky Mountain Front Raptor Guidelines (see Appendix 2.2) to new mineral leases within the raptor habitat; not permitting communication sites on the West and Middle Buttes; maintaining and/or improving important wildlife habitat; recommending revocation of 529.67 acres of the Bureau of Reclamation (BR) withdrawal and reopening the area to mineral entry; and keeping the ACEC open to mineral entry under the mining laws.

Management direction for the Cow Creek area would include: preserving the scenic, interpretive, recreation and paleontological values; reevaluating the visual resource management ratings; and emphasizing riparian management.

Designation and management of the Kevin Rim as an ACEC may significantly increase the operation costs for oil and gas developers as a result of more stringent stipulations to protect raptor species and cultural resources. The mineral and utility industries could be moderately impacted by the potential for restricting ROWs from the east side of the Kevin Rim. Management emphasis on the raptor and cultural resources would produce a significant positive impact for the raptor habitat and a moderately beneficial impact to cultural resources.

The additional workload of preparing a Plan of Operations for small mineral disturbances in the Sweet Grass Hills would create a moderate negative impact to the mineral industry. The opening of 529.67 acres to mineral entry would be a significant positive impact to the minerals industry. If mineral exploration led to the development of an open-pit mining operation, significant negative impacts would be experienced to vegetation and wildlife resources. Continued development in the Sweet Grass Hills would seriously alter the solitude necessary for Native American religious practices, a significant negative impact.

Management of the Cow Creek area as a designated ACEC would create a significant improvement in riparian vegetation, soils, streambank stability and water quality. The improvement in vegetation condition would be a significant positive impact to wildlife habitat in the area. The application of more stringent restrictions for surface development would enhance the preservation of the Nez Perce National Historic Trail, a significant benefit. The emphasis on the visual and natural resource qualities of the area would be a moderately positive benefit.

Upper Missouri National Wild and Scenic River Management

BLM would provide recreational opportunities and visitor services consistent with the Wild and Scenic Rivers Act and amendments applicable to the UMNWSR. The following management guidance would be used to accomplish this goal: user capacity would be reassessed using the Limits of Acceptable Change (see Appendix 2.10 of the draft); visitor facilities would be maintained and operated as necessary from Memorial Day through Thanksgiving; areas would be developed for self-guided interpretive study; and recreational use of islands would be restricted during deer fawning and waterfowl broodrearing times.

Facility management guidelines would include: maintaining undeveloped campsites; maintaining semi-developed campsites, and developing new semi-developed sites based on need and criteria listed under the alternative; and providing developed sites in the recreational segments, based on demand and economic feasibility. Developments in the wild segments would only be allowed if they can be serviced by existing access and are consistent with the Wild and Scenic Rivers Act.

BLM would continue to manage Montana Department of Fish, Wildlife and Parks (FWP) campgrounds under the Memorandum of Understanding with the State of Montana.

BLM would encourage private sector initiatives in the development of river management opportunities.

Provisions for search and rescue and law enforcement would continue as a cooperative effort with local and state agencies. BLM could expand its operations in these areas.

The potential loss of oil and gas reserves within the UMNWSR Corridor would continue, as the area would remain closed to leasing.

Alternative A—No Action

Land Tenure Adjustment

The BLM would attain a land pattern conducive to ease of management or optimum utilization of resources. To achieve this goal a total of 44,143 acres of public land have been identified for disposal with an emphasis on exchange. Retention and acquisition tracts would generally be in areas of major federal holdings such as the UMNWSR Corridor, northern Blaine County, and the Sweet Grass Hills.

If land adjustment is by sale, there could be a long-term reduction in native vegetation; a moderate impact to vegetation and wildlife. However, if land adjustment is through exchange, a moderate positive benefit could result from the acquisition of high-value wildlife habitat. Land adjustments which dispose of small, isolated tracts would be a moderate positive benefit for grazing management. The consolidation and acquisition of access would provide a multitude of significant benefits for recreation.

Off-Road Vehicle Management

The BLM would continue to allow unrestricted ORV use in the majority of the planning area (477,763 acres). ORV use would be limited to existing roads, trails and ways on 148,335 acres of public land in areas of steep sedimentary breaks soil types with slopes greater than 30%, and in wilderness study areas.

Limiting ORV use on 148,335 acres to existing roads and trails would produce locally significant, but moderate overall benefits on the sedimentary breaks soils and associated watersheds through the lack of disturbance to fragile soils; which would reduce erosion. Locally significant negative impacts to soils and associated watersheds would occur on 168,855 acres of sedimentary soils and riparian areas open to ORV use from accelerated erosion and loss of productivity.

Locally significant damage to vegetation would continue in high use ORV areas. A locally moderate long-term impact to cultural resources could occur in areas open to ORV use.

Right-of-Way Location

The entire planning area would be open to right-of-way and communication site location.

Locally significant impacts in the form of increased erosion and sedimentation would occur from surface disturbance associated with ROW location in areas of sedimentary breaks soils. The minerals industry could select the most cost effective route for transmission facilities under this alternative; a moderate positive impact. ROW location in raptor habitat areas could cause locally significant negative impacts to raptors.

Mitigation would be developed through environmental analysis of each proposed project.

Emphasis Areas

Current management practices and allocations would continue in the Kevin Rim, Sweet Grass Hills, and Cow Creek areas.

In the Kevin Rim area, standard oil and gas stipulations would mitigate impacts to raptor and cultural resources. Cultural inventories would be completed prior to surface disturbance and transmission and distribution ROWs would continue to be permitted.

In the Sweet Grass Hills, the standard oil and gas stipulations would be used to mitigate impacts to raptors and cultural resources. The area would remain open to operation under the mining laws and the BLM would continue consultation with Native American tribes. The BLM would recommend the revocation of 529.67 acres of the BR withdrawal on East Butte and reopen these lands to the mineral entry.

Current uses would continue in Cow Creek. This would involve managing the Nez Perce National Historic Trail in cooperation with U.S. Forest Service (USFS), and applying standard stipulations to mineral developments and other surface disturbing activities.

Oil and gas activity in the Kevin Rim area would continue to be mitigated by a 1/4-mile restriction around active raptor nests. This protection is not adequate to prevent disturbance to breeding or nesting raptors; resulting in a significant negative impact. Oil and gas exploration and development would create a moderate negative impact to cultural resources.

Reopening 529.67 acres to mineral entry in the Sweet Grass Hills would produce a significant positive impact for the minerals industry. If mineral exploration led to the development of an open-pit mining operation, significant negative impacts to vegetation and wildlife resources would be experienced. Continued development in the Sweet Grass Hills would seriously alter the solitude necessary for Native American religious practices, a significant negative impact.

Upper Missouri National Wild and Scenic River Management

BLM would continue to provide recreational opportunities consistent with the Wild and Scenic Rivers Act as amended, and as outlined in the Upper Missouri National Wild and Scenic River Plan (BLM 1978). User capacity limits would remain in effect from Coal Banks Landing to the Fred Robinson Bridge and visitor contact facilities would be operated from Memorial Day to Labor Day. Interpretive facilities and sites would be self-guided and keyed to the Floater's Guide. Islands would be available for recreational use. Undeveloped and semi-developed sites would be maintained and additional sites could be developed. Developed sites would be allowed at major launch/take out sites in the recreational segments.

BLM would continue to manage the Montana FWP sites under the MOU with the State of Montana. Private sector initiatives, would be limited to outfitting, guiding and boat rentals. Associated development would be limited to the major launch/take out points in recreational segments. Local and state agencies, with BLM support, would provide for search and rescue and law enforcement.

The potential loss of oil and gas reserves within the UMNWSR Corridor would continue, as the area would remain closed to leasing.

Increased visitor use of the UMNWSR could result in a locally significant impact to vegetation because of increased soil compaction, erosion and trampling.

Alternative B

Land Tenure Adjustment

The BLM would attain an economical and manageable public land base.

A total of 50,117 acres of public land would be identified for disposal, with an emphasis on exchange. Retention and acquisition efforts would be keyed toward blocking up BLM land patterns in the Sweet Grass Hills, Kevin Rim and Cow Creek Areas; in the Marias River and Missouri River Corridors; and important wildlife areas and the Rocky Mountain Front.

Land disposal through sale would be a moderate negative impact due to the loss of native vegetation and 9,885 acres of crucial wildlife habitat. A moderate positive impact could occur through the acquisition of high-value wildlife habitat. Grazing management options would be enhanced by exchanges consolidating lands, or reduced if lands are disposed of through sale. Recreational values would benefit significantly from land adjustment increasing access and consolidation.

Off-Road Vehicle Management

BLM would maximize opportunities for ORV use within the planning area; 594,098 acres would be open for use. In the open area, BLM would designate a 640 acre tract as an area for intensive ORV use. ORV use would be limited to existing roads and vehicular ways on 32,000 acres within WSAs.

ORV limitations on 32,000 acres would reduce further vehicular disturbance to fragile soils; a locally significant, but moderate overall, positive impact. In areas open to ORV use, there is a potential for locally significant impacts to soils in watersheds and riparian zones as streambank stability is reduced, and to 285,190 acres of sedimentary breaks type soils from accelerated erosion and loss of productivity. Vegetation would be eliminated from about 20 acres in the intensive use area. Wildlife would experience habitat destruction and harassment, a moderate negative impact. Potential destruction of cultural sites in areas open to ORV use would be a moderate negative impact.

Right-of-Way Location

The majority of the planning area would be available for lineal rights-of-way location. Nationally designated areas (i.e., UMNWSR) would be avoidance areas. Seven windows are identified in the recreational and scenic segments of the UMNWSR Corridor.

The planning area would remain open to communication site location.

ROW location in sedimentary breaks type soils would create locally significant impacts due to runoff, erosion and sedimentation. ROW location within raptor habitat areas would cause disturbance and possible nest abandonment, a locally significant negative impact.

Emphasis Areas

Current management practices and allocations (described under Alternative A) would continue in the Kevin Rim, Sweet Grass Hills and Cow Creek areas.

The impacts to resources in the three emphasis areas would be the same as those identified in Alternative A.

Upper Missouri National Wild and Scenic River Management

The BLM would maximize the full range of land and water based recreation opportunities consistent with the Wild and Scenic Rivers Act, as amended. Management direction would include: not setting user capacity limits; operating visitor facilities from Memorial Day through Thanksgiving; developing interpretive sites; and allowing recreational use of islands. BLM would maintain and upgrade undeveloped sites to semi-developed sites. Semi-developed sites would be maintained and additional sites would be developed. Developed sites would be allowed in the recreational and scenic segments, based on need and economic feasibility.

BLM would not manage or acquire existing Montana FWP campsites.

Private sector initiatives would be encouraged to help achieve a full range of visitor services. Search and rescue and law enforcement would be coordinated by or contracted to local authorities.

The potential loss of oil and gas reserves within the UMNWSR Corridor would continue, as the area would remain closed to leasing.

Locally moderate negative impacts to soils and vegetation would occur in the UMNWSR Corridor due to increased development and human traffic.

Alternative C

Land Tenure Adjustment

The BLM would emphasize the retention of public lands.

A total of 15,689 acres of public land would be identified for disposal with an emphasis on exchange. Retention and acquisition efforts would be keyed toward blocking up BLM land patterns in the Sweet Grass Hills, Marias River, Missouri River, north Blaine County, Cow Creek, Kevin Rim, and important wildlife habitat areas.

A locally significant negative impact to mineral development would occur if lands are acquired in the Sweet Grass Hills, due to the proposed protective withdrawal. Impacts to native vegetation and wildlife could occur if lands are disposed of through sale and those lands were plowed. Land adjustment through exchange would be a moderate positive impact due to the acquisition of high value wildlife habitat. Grazing management options would be enhanced by exchanges consolidating lands, or reduced if lands would be disposed of through sale. Recreational values would benefit significantly from land adjustments increasing access and consolidation.

Off-Road Vehicle Management

The BLM would provide maximum protection to the physical and biological environment and reduce to the fullest extent possible the negative impacts from off-road vehicles. To accomplish this, ORV use in the UMNWSR Corridor; the Kevin Rim, Sweet Grass Hills and Cow Creek ACECs; WSAs; areas of sedimentary breaks type soils; and riparian areas (329,794 acres) would be limited yearlong to designated roads and trails. Seasonal restrictions would be applied to important wildlife habitat (99,000 acres). A total of 428,794 acres would be limited to ORV use. The Gist Road between the cabins and the river would be closed (5 acres).

ORV limitations on 317,190 acres of sedimentary breaks soils and riparian areas would reduce further vehicular disturbance to fragile soils; a locally significant, but moderate overall positive impact to the area. ORV limitations would create moderate positive impacts by reducing vehicular disturbance to vegetation and harassment of wildlife.

Right-of-Way Location

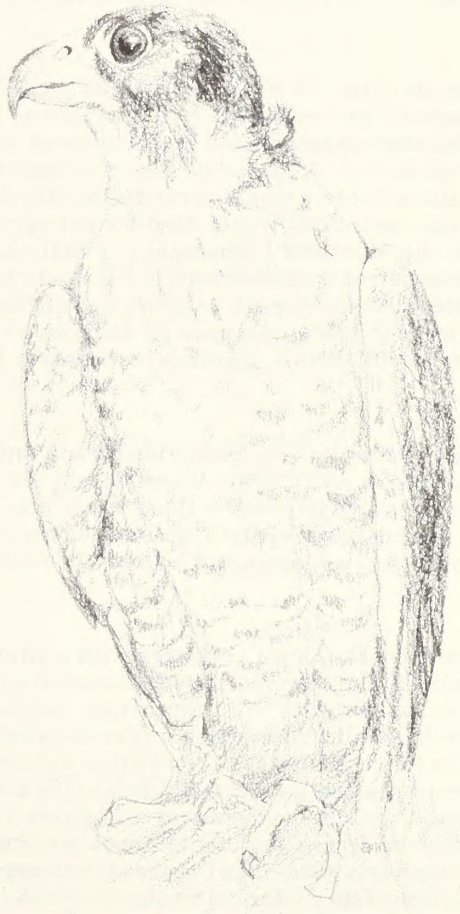
The BLM would protect important natural and cultural resources and special management areas. The Kevin Rim and the UMNWSR would be designated exclusion areas for lineal ROWs. Windows would be provided through the recreational and scenic segments of the UMNWSR. WSAs, the Sweet Grass Hills and Cow Creek ACECs, areas of sedimentary breaks type soils and riparian areas would be designated avoidance areas. The BLM would not permit communication site location on West and Middle Buttes of the Sweet Grass Hills.

Locally significant impacts would be associated with lineal ROW location through the windows in the UMNWSR due to increased runoff, erosion and sedimentation associated with the sedimentary breaks soils. Routing ROWs around avoidance and exclusion areas would increase costs and create a locally moderate impact to mineral and utility companies. Exclusion and avoidance of ROW location in the area would be a moderate positive impact to vegetation.

Emphasis Areas

The BLM would provide maximum protection of the significant resources in the Kevin Rim, Sweet Grass Hills and Cow Creek areas. These areas would be designated ACECs and the following management goals and guidance applied.

The Kevin Rim would be designated to provide protection, maintenance and enhancement to raptor habitat and cultural resources while providing for continued oil and gas development. The Rocky Mountain Front Raptor Guidelines would be used to develop mitigation. New projects within 1/4-mile of the base of the Kevin Rim escarpment would be authorized, only if impacts to cultural resources could be mitigated. No new ROWs would be permitted on the east side of Kevin Rim.



The East, Middle, and West Buttes of the Sweet Grass Hills would be designated an ACEC to protect and maintain the area for Native American religious and cultural practices, public recreation and wildlife habitat. The BLM would pursue a protective withdrawal for the area, the Rocky Mountain Front Raptor Guidelines would be used to develop site specific mitigation for activities in occupied raptor habitat, and allotment management plans would be revised to emphasize the maintenance and enhancement of elk habitat. BLM would recommend revocation of 529.67 acres of the BR withdrawal and these lands would be included in the protective withdrawal.

The Cow Creek area would be designated to protect, maintain and/or enhance the Nez Perce Historic Trail, Cow Island Trail and other resources in the area. The BLM would preserve the scenic, interpretive, recreation and paleontological values associated with the Nez Perce National Historic Trail, reevaluate the visual resource management ratings and emphasize riparian management in the ACEC.

Management of the Kevin Rim area as an ACEC would create a significant negative impact to oil and gas developers by increasing operation costs. A locally significant positive impact to raptors would result from implementing the raptor stipulations and the proposed management of cultural resources would eliminate impacts to cultural resources at the base of the escarpment, a moderately beneficial impact.

Management of the Sweet Grass Hills as an ACEC would create a significant negative impact to oil and gas development because leasing would not be allowed under a protective withdrawal. A moderate negative impact to valid existing claim holders would occur due to the requirement that mining operations would need formal approval from BLM and the Montana Department of State Lands. The 529.67 acres currently withdrawn to BR would be included in the protective withdrawal; a significant negative impact to the mineral industry. An open pit mine on a valid existing claim would have a significant negative impact on wildlife.

Management direction for raptor protection and elk habitat maintenance and enhancement would create locally significant positive impacts to those resources. This management direction would also create a moderately positive impact to cultural resources and Native American religious use.

Management of the Cow Creek area with a strong emphasis on riparian management would produce locally significant positive impacts by improving vegetation and streambank stability and decreasing erosion and sedimentation. The improvements in the riparian habitat would be a significant positive impact to wildlife in the area. The use of stringent surface development standards in the area would be a long-term significant impact to cultural resources. The emphasis to manage the area for preservation and interpretation of the historical resources and the protection and enhancement of the visual and natural qualities would be a moderate positive impact.

Upper Missouri National Wild and Scenic River Management

The BLM would emphasize the maximum preservation of the natural environment and cultural values of the UMNWSR Corridor. This would be accomplished by redetermining the user capacity based on the Limits of Acceptable Change; maintaining and operating visitor facilities from Memorial Day to Thanksgiving; limiting interpretive developments to major launch/take out points; keying other interpretive efforts to the Floater's Guide; and closing islands to recreational use.

The BLM would continue to maintain existing undeveloped and semi-developed sites. Additional site development could occur if impacts could be mitigated and no crucial wildlife habitat and cultural resources would be impacted. Developed sites would be restricted to existing launch/take out sites in the recreational and scenic sections of the Corridor. The BLM would acquire and manage the Montana FWP campsites. The BLM would allow private sector initiatives in campground maintenance and development; outfitting services and boat liveries.

BLM would assume the responsibility for law enforcement on the river and continue the cooperative efforts on search and rescue operations.

The potential loss of oil and gas reserves within the UMNWSR Corridor would continue, as the area would remain closed to leasing. Increased interpretation and the emphasis on protection of cultural resources would be a moderate positive impact.

CONCLUSION

The impacts of the four alternatives tend to be similar in quality but different in the numbers of acres affected by given management actions. Alternative D, as modified, has been selected as the proposed Resource Management Plan because it presents a reasonable balance between commodity production and protection of amenity resources.

USING THIS DOCUMENT

Portions of the draft West HiLine RMP/EIS required revisions and corrections to respond to the concerns voiced during the public comment period. For the reader's convenience Chapters 1, 2 and 5 have been reprinted, with the revised text set in italic type.

Other portions of the draft required only minor corrections and those corrections are given in the Errata section of this final RMP/EIS.

The questions and concerns from the public hearings and comment period on the draft are numbered and shown in the Chapter 5 portion of this document. Chapter 5 also contains BLM's responses to those questions and concerns.

New or revised tables, figures, appendices and glossary and reference items can be found according to the following table.

This table should help the reader understand the relationship between the various segments of the draft and this final document. Only those portions of the draft requiring revision or correction are shown on this table and addressed in this document. The remaining portions of the draft were accurate as printed.

LOCATION IN DRAFT	AMOUNT OF REVISION	LOCATION IN FINAL
Summary	Revised and Reprinted	Summary
Chapter 1	Revised and Reprinted	Chapter 1
Chapter 2	Revised and Reprinted	Chapter 2
Chapter 3	Revised	Errata
Chapter 4	Revised	Errata
Chapter 5	Revised and Reprinted	Chapter 5
Table 3.15	Revised and Reprinted	Errata
Table 4.1	Revised and Reprinted	Errata
Table 4.2	Revised and Reprinted	Errata
Table 4.3	Revised and Reprinted	Errata
Table 4.4	Revised and Reprinted	Errata
Figure 3.5	Revised and Reprinted	Errata
Figure 3.6	Revised and Reprinted	Errata
Figure 3.10	New	Errata
Figure 3.11	New	Errata
Glossary	Revised and Reprinted	Glossary
References	Revised and Reprinted	References
Appendix 1.1	Revised and Reprinted	Appendix 1.1
Appendix 1.2	New	Appendix 1.2
Appendix 1.3	New	Appendix 1.3
Appendix 2.2	Revised and Reprinted	Appendix 2.2
Appendix 2.3	Revised and Reprinted	Appendix 2.3
Appendix 2.6B	Revised and Reprinted	Appendix 2.6B
Appendix 2.9	Combined with Appendix 2.2	Appendix 2.2
Appendix 3.1	Revised and Reprinted	Appendix 3.1
Appendix 3.2	Revised and Reprinted	Appendix 3.2
Appendix 3.4	New	Appendix 3.4
Appendix 4.2	New	Appendix 4.2

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CHAPTER 1

INTRODUCTION

This document is *the proposed final* Resource Management Plan *and final* Environmental Impact Statement (RMP/EIS). *It incorporates comments and suggestions made on the draft RMP/EIS during the 90-day public review period which began in May, 1987. It also includes minor corrections and additions identified after the draft was published. The RMP portion of this proposed final consists of the proposed alternative (Alternative D) plus the guidance given in the Management Common to All Alternatives section.* The *EIS portion* consists of the information discussing the four alternatives throughout *this final.*

This document has been prepared in accordance with the Bureau of Land Management's (BLM) planning regulations in the Code of Federal Regulations and the Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA), 1969.

The information contained in this document reflects current policy and regulatory information as of *February 1, 1988.* Policy or regulatory changes after the RMP is finalized *would* be incorporated through plan maintenance, unless they reflect a change in management direction. *A change in management direction would require the RMP* be amended or a new RMP written.

LOCATION OF THE PLANNING AREA

The *West HiLine* planning area is located in the northcentral portion of Montana *(see Figure 1.1).* It is bounded on the north by Canada, on the east by Phillips *County*, on the south by *Pondera, Teton and Cascade Counties and the Missouri River* and to the west by Glacier National Park.

The planning area includes the entire Havre Resource Area (Hill and Blaine Counties and that portion of Chouteau County north of the Missouri River), *and* that portion of the Great Falls Resource Area located in Glacier, Toole and Liberty Counties. *It also includes the Upper Missouri National Wild and Scenic River Corridor, and adjacent public lands in the Judith Resource Area (Choteau and Fergus Counties) and the Phillips Resource Area (Phillips County).*

The planning area encompasses 11,285,025 acres, *most of which is privately owned. The BLM administers* 626,098 surface acres (5.5%) and 1,328,014 subsurface acres (11.7%). Other significant landownerships include the Blackfeet, Rocky Boys and Fort Belknap Indian Reservations, small portions of Glacier National Park, the Lewis and Clark National Forest, and some state lands. Table 1.1 portrays the ownership by resource area, within the planning area.

This plan only covers the management of public lands administered by the BLM. It does not affect private lands or lands administered by other federal agencies, within the planning area.

Figure 1.1 Location Map of the West HiLine Resource Management Area.

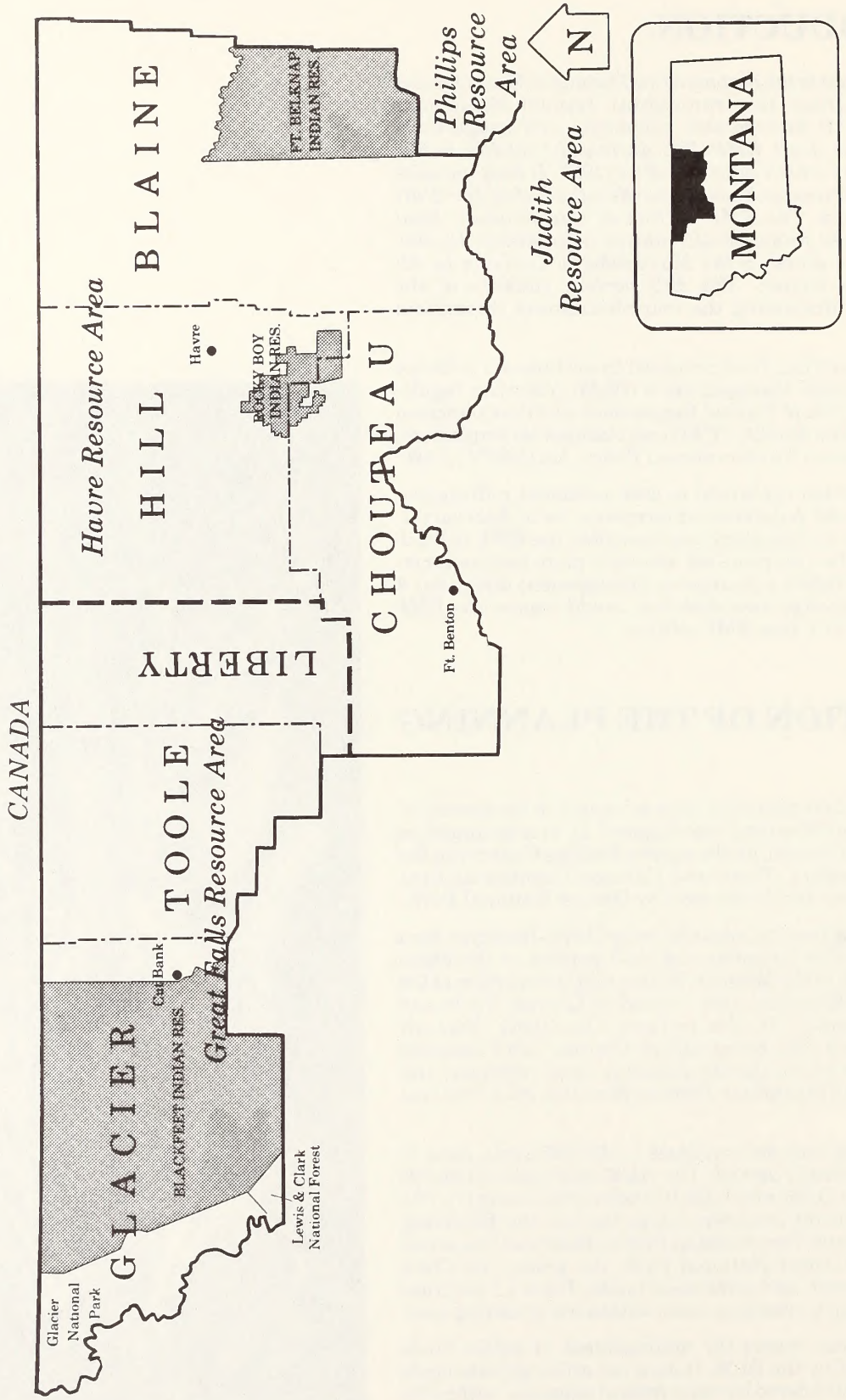


TABLE 1.1 LAND OWNERSHIP BY RESOURCE AREA IN THE PLANNING AREA[1]

RESOURCE AREAS	SURFACE						SUBSURFACE	
	BLM	Private	State	Native American Lands	Other Federal	Total Surface	BLM	Other
Great Falls	37,334	2,057,332	294,772	1,313,563	439,452	4,142,453	178,658	3,963,795
Havre	541,573	5,217,867	597,000	632,000	85,000	7,073,440	1,111,952	5,961,488
Judith[2]	42,588	15,155	6,475	0	0	64,218	32,770	31,448
Phillips[2]	4,603	224	87	0	0	4,914	4,634	280
TOTAL	626,098	7,290,578	898,334	1,945,563	524,452	11,285,025	1,328,014	9,957,011

[1] Montana Department of State Lands, 1984
BLM Public Lands Digest Montana, 1984

[2] These acreage figures are for lands important to river management only.

PURPOSE AND NEED

The West HiLine RMP will provide a master plan for managing and allocating public land resources within the planning area over the next 10 to 15 years, *and precedes the activity planning level. The activity plan is a site-specific, detailed plan that may precede actual site development.*

This RMP also resolves several resource issues. It identifies lands for retention, acquisition and disposal; *amends the existing designations for open*, limited or closed to off-road vehicle (ORV) use *areas*; identifies areas not suitable for transmission and communication site right-of-way *(ROW)* location; identifies areas where management emphasis may be required; and determines *recreation* management direction for the Upper Missouri National Wild and Scenic River Corridor.

Management guidance for other resources in the planning area is found in the Management Common to All Alternatives section of Chapter 2. This guidance was carried forward from five management framework plans and five major environmental documents prepared in the 1970s and 1980s. The guidance given in that section will be followed no matter which alternative is selected and is a substantial portion of this RMP.

When *the Record of Decision is published*, this RMP will supersede all previous planning efforts. It will also consolidate all major land use decisions for BLM-administered lands in the planning area into one document.

ISSUES

At the beginning of the planning process, the BLM, general public, other federal agencies and state and local governments identified the following issues and management concerns for the planning area.

Land Tenure Adjustment

The BLM manages a variety of public lands in the West HiLine area, including public domain (lands which have never left federal ownership), land utilization *lands* (lands which left federal ownership and were later acquired under the Bankhead-Jones Act), and mineral estate (subsurface) lands. Many of these lands are widely scattered and often pose multiple resource management problems. This document will identify which lands should be retained, *which lands may leave federal ownership and areas where BLM would like to acquire* lands.

Off-Road Vehicle Management

Off-road vehicle use is increasing throughout the planning area and *unauthorized* roads *and trails* are extending into previously unroaded areas. Executive Order (EO) 11644, as amended by EO 11989, directs that all public lands be designated as open, limited or closed to off-road vehicle use. This *RMP* will *amend* those designations. *Existing ORV designations will be reviewed and adjusted to minimize conflicts with other ORV user groups, other public land users and other resource programs.*

Right-of-Way Location

This RMP will deal with ROW corridor planning by identifying avoidance areas, exclusion areas and timing windows. It will not identify corridors. The rationale for not designating corridors within the planning area is based on the small amount of public land along occupied corridors. Map 4 in the back of this document, shows the occupied corridors as portrayed by the Western Regional Corridor Study of 1986.

This planning effort will also identify areas which are not suitable for communication site location.

Emphasis Areas

Two areas in the Great Falls Resource Area and one in the Havre Resource Areas *have been* identified as emphasis areas that may need management emphasis to protect or preserve particular resources. Figure 1.2 *shows the* location of these areas.

The Kevin Rim has high potential as a peregrine falcon reintroduction area; is currently a high use area for a variety of raptors; and contains *significant cultural resources.*

The Sweet Grass Hills are significant because of their importance as a religious and cultural use area for Native Americans; *because they are an integral part of the peregrine falcon reintroduction area*; because they contain high value recreational lands; and because they support diverse wildlife populations.

The Cow Creek area contains a segment of the Nez Perce National Historic Trail, the Cow Island Trail and the Lewis and Clark National Historic Trail. It also includes portions of the Upper Missouri National Wild and Scenic River (UMNWSR) and the Cow Creek Wilderness Study Area (WSA).

Upper Missouri National Wild and Scenic River Management

The Upper Missouri National Wild and Scenic River was designated in 1976, and since that time there have been significant increases in recreational use of the river. This RMP affords BLM the opportunity to analyze the issue of increasing recreational expectations.

The proposed alternative plus the guidance given in the Management Common to All Alternatives section will provide direction for revising the Coordinated Resource Activity Plan, which will prescribe specific management actions along the UMNWSR.

ISSUES NOT ADDRESSED

Numerous concerns were identified during the scoping process that *were beyond the scope of* this RMP. The disposal of produced water from oil and gas production; the development of water resources in the Milk River Valley; the Milk River water diversion proposal by the Bureau of Reclamation; the management of range resources on Bureau of Reclamation lands; and the cleanup of the Kevin Sunburst oil field are examples of issues that can't be resolved in an RMP.

The guidance for the majority of these issues is contained in various Memorandums of Understanding among the BLM, the Bureau of Reclamation and the State of Montana.

Coal development is not addressed in this RMP because the planning area is not in a coal production area and no federal coal leasing will result from this plan. In addition, major coal and mineral operators and organizations were contacted to determine *their* interest in the coal *resources* in the planning area, and there was no apparent interest in these *resources*. Any potential federal coal leasing would be guided by the federal coal management regulations (43 CFR 3425). Any future application for a coal lease would be studied for acceptability utilizing these four planning screens: verification of coal development potential; application of the 20 unsuitability criteria; surface owner consultation (for split-estate lands); and multiple use trade-offs involving other resource values compared to coal. For underground coal mine development, the surface owner consent screen is not applicable. Unsuitability criteria *would* be applied to surface facilities that are associated with underground mining.

Application of these screens would constitute an amendment to this RMP and would be subject to *state government* and public review. If some areas would be found acceptable for *leasing* consideration; the applicant maintains interest; and evidence of surface owner consent is provided; these lands could be offered for competitive lease by the Secretary of the Interior.

Access needs have been addressed in general terms *with existing information* and for geographic areas rather than for specific needs and routes. The Lewistown District is committed to completing an access inventory that will, with public involvement, allow BLM to address the specific access needs for the West HiLine planning area. *The inventory* information on specific routes and acquisition needs will be presented in an Access Activity Plan *within* several years.

ISSUES PREVIOUSLY ADDRESSED

Concerns about grazing management, riparian management, wilderness management and oil and gas management were all identified during the scoping process. However, these resource issues have been addressed in previous planning efforts and are *discussed* in the Management Common to All Alternatives section of Chapter 2. *Additional detailed information concerning oil and gas leasing is available in Appendix 1.3.*

PLANNING CRITERIA

Planning criteria may be legal, policy, or regulatory constraints that direct or limit BLM's ability to resolve issues, or they may respond to public *opinion and* coordination efforts with state or local governments and other federal agencies. General criteria were developed to guide the RMP/EIS. Specific criteria for each issue were then developed to guide the formulation of alternatives and selection of the *proposed* alternative.

Figure 1.2 Location Map of the Emphasis Areas and the Upper Missouri National Wild and Scenic River Corridor.

General Criteria

This plan will provide BLM with broad resource management guidelines to implement a variety of activity plans. Specific guidance will be used *only where resolution of* major management conflicts *is needed.*

The BLM will adhere to the *program* guidance provided by BLM's Washington Office Supplemental Guidance for RMPs (1986) and the State Director's Guidance for RMPs (1983/1984).

Valid *management guidance* from existing documents will be carried forward in the Management Common To All Alternatives section of Chapter 2.

The RMP alternatives will be developed on a planning area wide basis *and* will only analyze those issues requiring management resolution. The RMP/EIS and supporting documents will incorporate all available valid decisions, analysis and information.

The RMP will apply mitigating measures or stipulations only to resolve existing or projected management conflicts. Most of these will be standard operating procedures and will be identified in the Management Common to All Alternatives section of Chapter 2.

Any decision or mitigative measure required by the RMP will be enforceable and *capable of being monitored.*

The plan will dovetail with local, county, state and other federal agency plans *to the greatest extent possible. The Bureau has coordinated with* other agencies for assistance in determining consistency with their plans. This *coordination has been* accomplished through the review process.

The RMP will be used as the basic planning document to guide *BLM* management and budget requests for the planning area over the next 10-15 years. Revisions will be made as necessary.

The final RMP will be divided to address two planning units. One planning unit is the entire Havre Resource Area (which will include the management guidance for the UMNWSR). The decisions affecting the UMNWSR will later be incorporated into the Judith, Phillips and Valley *RMP* when *that* document *is* prepared. The other planning unit is the northern portion of the Great Falls Resource Area. *The Great Falls section will incorporate pertinent decisions* from the Headwaters RMP, thus providing the Great Falls Resource Area with one RMP.

Issue Specific Criteria

Issue No. 1: Land Tenure Adjustment

The public land sale criteria from the Federal Land Policy and Management Act (FLPMA) and the acquisition, disposal and retention criteria from the Supplement to the State Director's Guidance, June 1984: will be applied to public lands in the planning area. The criteria in the State Director's Guidance was refined for each resource area. The criteria to be used in identifying lands for acquisition, retention and disposal is presented in Appendices 1.1 and 1.2.

Issue No. 2: Off-Road Vehicle Management

Public interest for proper resource utilization, safety, and environmental protection will be used to determine the need for ORV use restrictions under the limited or closed designations. These restrictions will be needed to minimize: damage to vegetation and cultural resources; soil erosion; water degradation; harassment of wildlife and the loss of their habitat; and nonimpairment of wilderness study areas. Limited restrictions will apply to certain types of vehicles, times of the year, areas or trails, or to kinds of conditions. Closed restrictions will apply all year to all types of ORVs by areas or by designated roads or trails.

The open designation will apply to lands not otherwise limited or closed.

Issue No. 3: Right-of-Way Location

An area will remain open to lineal and communication site right-of-way location unless restrictions are needed to: minimize adverse impacts to high value wildlife habitat; minimize visual intrusions to the Upper Missouri National Wild and Scenic River Corridor; avoid impacts to WSAs; and to avoid destruction of historic and archaeological sites listed (or with potential for listing) on the National Register of Historic Places.

All future transmission line sitings will consider the Montana Interagency Agreement for right-of-way siting and the Department of Natural Resources and Conservation siting rules. Future sitings will also consider existing corridors. *The Glossary portion of this document gives the comparative definitions between BLM and the Montana Major Facilities Siting Act for avoidance areas, exclusion areas and timing windows.*

Issue No. 4: Emphasis Areas

All high resource values *in these areas*, including, but not limited to, wildlife, cultural, minerals and recreation will be identified.

Resource conflicts will be identified *and* public needs and demands for the resources present will be considered; including but not limited to, existing mining claims and mineral leases.

The *RMP* will strive to balance resource use, while ensuring the protection and preservation of significant resources.

Issue No. 5: Upper Missouri National Wild and Scenic River Management

Management actions will *remain consistent* with the Wild and Scenic Rivers Act (PL 90-542 1968) and its amendment for the Upper Missouri National Wild and Scenic River (PL 94-486, 1976).

This RMP will provide for utilization of recreation resources.

Resource conflicts will be identified and resolved in the alternatives.

This RMP will provide for visitor services through a blend of private and public initiatives within the constraints of the Wild and Scenic Rivers Act *as amended*, and the Memorandum of Understanding with the National Park Service.

Management will continue the segregation of locatable minerals within the wild segments of the UMNWSR Corridor. In addition, BLM will not lease minerals within the *remainder of the* corridor until rules are *developed* by the Secretary of the Interior.

CHAPTER 2: ALTERNATIVES

INTRODUCTION

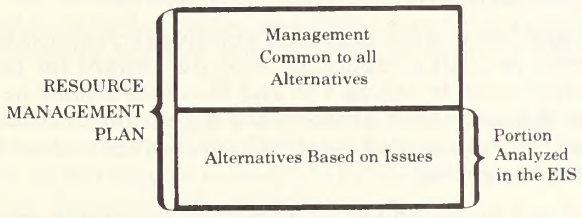
This chapter is presented in two major portions; the Management Common to All Alternatives section and the alternative descriptions.

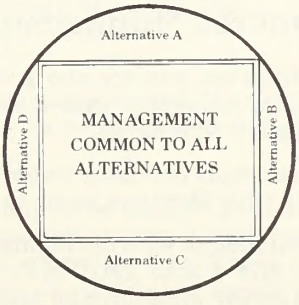
The guidance given in the Management Common to All Alternatives section has been carried forward from existing laws, regulations and previous planning efforts. It is current, valid management guidance which will be followed no matter which alternative is selected and is a substantial portion of the Resource Management Plan (RMP). *That guidance*, combined with the *proposed* alternative *forms* the RMP for the entire planning area. Figure 2.1 shows the relationship of this guidance and the alternatives.

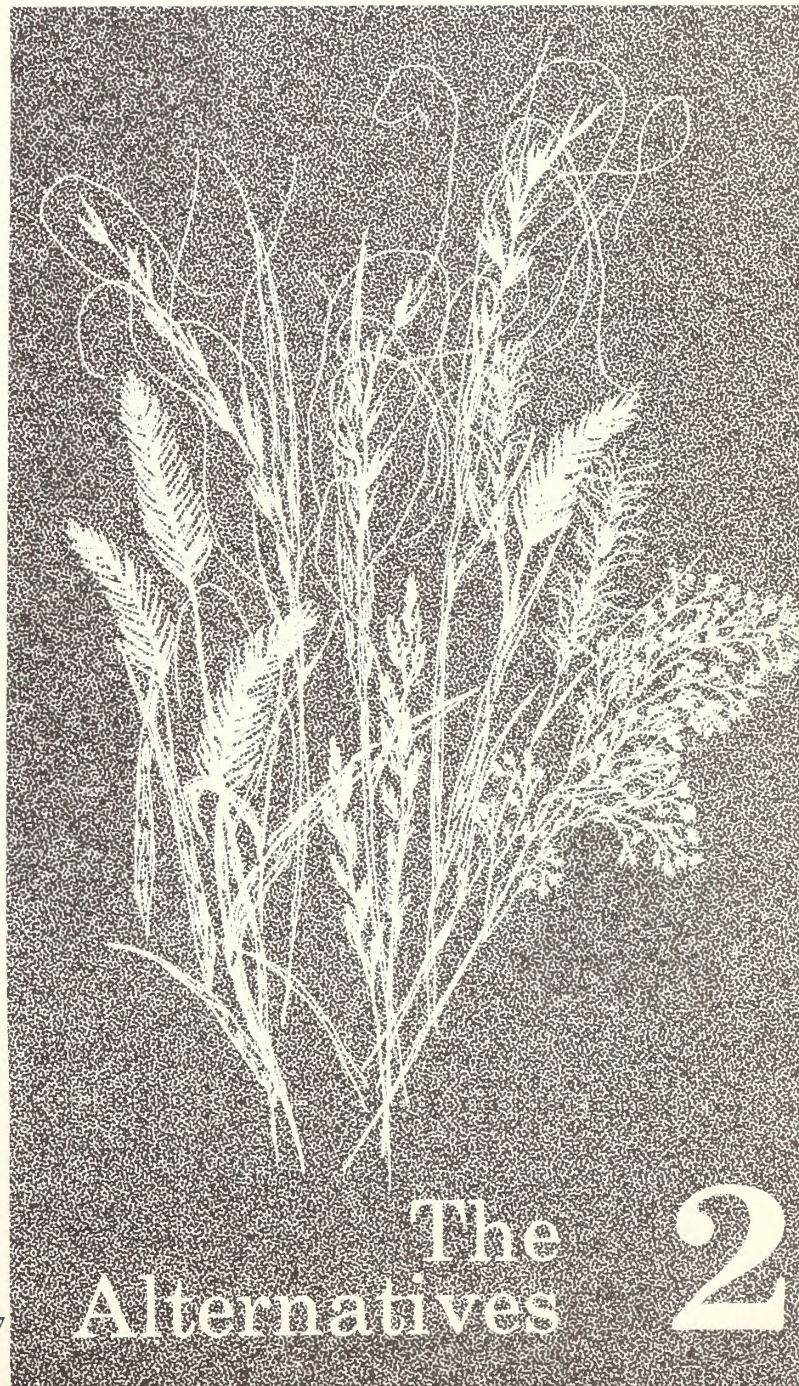
The second portion of this chapter describes the four alternatives (Alternative A, No Action; Alternative B; Alternative C; and Alternative D, the *Proposed* Alternative) *designed* to resolve the issues discussed in Chapter 1.

All four alternatives comply with the Federal Land Policy and Management Act requirement that the public land be managed on the basis of multiple use and sustained yield.

Figure 2.1 Relationship of Alternatives to Management Common to All Alternatives.







ALTERNATIVES ELIMINATED FROM DETAILED STUDY

Alternatives proposing maximum resource production or protection of one resource at the expense of other resources were *not* considered because this would violate the Bureau of Land Management's (BLM) legal mandate to manage public land on a multiple use, sustained yield basis.

MANAGEMENT COMMON TO ALL ALTERNATIVES

The following guidance will continue regardless of which alternative is selected. It's the result of existing laws, regulations and previous planning efforts. *Valid decisions from the Triangle, Blaine, South Bearpaw, Fergus and Phillips (UL-Zortman) Management Framework Plans (MFP); the Prairie Potholes EIS (1981); the Missouri Breaks Grazing EIS (1979); the Missouri Breaks Wilderness EIS (1987); the Lewistown District Oil and Gas Leasing Environmental Assessment (EA) (1981); the Lewistown Noxious Plant EA (1986); and the Upper Missouri National Wild and Scenic River Plan (1978) have been brought forward into this section.*

The decisions listed in this section comprise a portion of each alternative analyzed and combined with the selected alternative, will serve as the Resource Management Plan.

This section is organized by ecological and human resource components. Two of the ecological components (vegetation *and* wildlife & fisheries) are subdivided to identify which BLM resource program is responsible for carrying out the guidance. Thus the vegetation component is subdivided to include vegetation related guidance for soil and water, riparian, forestry, wildlife, grazing and fire programs in an effort, to group similar information. In a similar effort, the wildlife *& fisheries* component is subdivided to include related information from the recreation program.

Air Quality Management

Under all alternatives, the BLM will comply with national and state air quality standards. The BLM will evaluate impacts to air quality, *at the* activity *planning* level, to ensure the continuation of the Class II airshed.

Implementation

Federal and state regulations require air quality monitoring for those activities which could impact existing air quality. Detailed monitoring and mitigation plans are written at the activity plan level. These measures will generally require actions to be undertaken during specific wind conditions to either disperse smoke or prevent chemical spray drift.

Prescribed fires in the area require *approval from the* Montana Department of Health and Environmental Science, Air Quality Bureau. All such plans will be forwarded to the appropriate airshed zone coordinator.

Venting or flaring *of* hydrocarbon gases associated with hydrogen sulfide (H_2S, sour gas) requires approval under the provisions of Notice to *Lessee*-4A. The Montana State Air Quality Bureau monitors this activity for compliance.

Soils Management

Under all alternatives, the BLM will maintain or improve soil productivity in the planning area by reducing erosion and increasing vegetative cover.

Implementation

Surface disturbing activities or planned surface disturbances, are evaluated and mitigation developed to reduce soil erosion. The methods used to make these evaluations are described in BLM Technical Note No. 346 (Erosion Condition Classification System) and the Modified Universal Soil Loss Equation Method developed by the U.S. Department of Agriculture-Agricultural Research Service. These books are available for review in the BLM District and State Offices and are used by soil scientists to develop mitigation measures. The BLM has developed soil suitability guidelines for specific actions (mechanical treatments, off-road vehicle (ORV), etc.) to help in soil management.

Prior to authorizing any surface disturbing activity (including but not limited to range improvement, mineral development, right-of-way location, or livestock grazing) the BLM will evaluate the activity and if necessary apply mitigating measures; deny the authorization; or relocate the activity to a more suitable soil type *location*. Specific measures will be developed for soils with high erosion susceptibility, steep slopes, sparse vegetation and shallow soil depth. Surface disturbing activities on floodplains will have riparian objectives and/or mitigation measures *written into* the activity plans to protect ground cover and streambank stability and to reduce sediment yields. All surface disturbing activities will require an on-site evaluation to develop mitigation to reduce erosion and soil compaction and *to* improve soil stability and salinity control. These mitigation measures will also prescribe revegetation programs.

All proposed reservoirs will be designed to minimize erosion, saline seeps, salt accumulations (i.e., selenium) and rapid sedimentation.

Roads and trails, when part of an approved transportation plan, will be built or upgraded with due regard for environmental considerations. Cut and fill slopes should be no steeper than 3:1. After access roads are no longer needed, they will be contoured to a natural appearance and seeded with native species.

Topsoil will be stockpiled for all surface disturbing activities and will be used to rehabilitate the area when the project is completed. Exceptions to this *stipulation*may be granted, based on a site specific evaluation.

Water Resource Management

Under all alternatives, surface and groundwater quality will be maintained to meet or exceed minimum state and federal water quality standards.

The BLM will continue to obtain water rights for all projects and comply with Montana water laws.

The BLM, in conjunction with the Montana Department of Fish, Wildlife and Parks (MDFWP), will recommend instream flows on the Missouri and Marias Rivers to protect stream morphology and biological and recreational

uses. Information on the recommended instream flows for the Missouri River can be found in the Missouri River Instream Flow Report, available in the Lewistown District Office.

The BLM will improve or maintain vegetative cover, especially on highly erosive soils, to reduce runoff.

Wetlands will be protected in accordance with the provisions of Executive Order (EO) No. 11990, Protection of Wetlands. Under the provisions of this EO, the BLM must minimize the destruction, loss or degradation of wetlands when acquiring, managing and disposing of federal lands and facilities.

Implementation

The objectives for areas with riparian vegetation, or the potential to support such vegetation, will be to maintain or improve riparian vegetation, water and groundwater quality and control streambank erosion. *These objectives will be identified, as necessary, in activity level planning (allotment management plan, habitat management plan, etc.).*

All proposed reservoirs will require a soils and hydrologic evaluation of the site. Reservoirs *should* be designed with a minimum 15-year life expectancy *and* all proposed reservoirs will be evaluated to determine the need for off-site water facilities. *These facilities will be provided, if necessary.*

All surface disturbing activities will require an on-site evaluation to mitigate impacts to water quality and quantity *and* should not alter stream courses. Other measures to protect stream courses will be evaluated for environmental impacts prior to project approval.

Monitoring techniques, frequency and methodologies will be developed and included in activity plans. The monitoring level will be determined after an evaluation of the resource and potential impacts.

Pumping facilities used to extract water from the Missouri River will be permitted in accordance with *Public Law* (PL) 94-486. An environmental assessment will be completed prior to permit issuance *and* visual resources and surface disturbance impacts will be mitigated *to the extent possible.*

Small amounts of oil field produced water which do not meet water quality standards will be disposed of in accordance with Notice To *Lessee-2B* and/or Environmental Protection Agency (EPA) guidelines.

The BLM will participate in the development of instream flow recommendations for the Marias River.

Paleontological Resource Management

Major paleontological deposits within the planning area will be protected *under* current Bureau policy.

Implementation

Permits will continue to be issued by the Montana State BLM Office, *so* qualified paleontologists *can* work on the public lands in the *planning area*. These permits can be issued for the study of significant fossils that are vertebrate, invertebrate or plant remains.

Potential impacts to paleontological resources will be considered on a case-by-case basis.

If paleontological resources are encountered during construction activities, the contractor must *cease activities and* report these findings to BLM for evaluation and determination concerning the disposition of such resources.

Management plans may be developed to protect paleontological resources of scientific interest.

Mineral Resource Management

Valid, existing mineral rights within the planning area will not be changed by any decision in this document. *None of the alternatives give BLM the discretion to prohibit mineral exploration or development on valid leases or mining claims.*

Under all alternatives, the BLM will continue to provide for the exploration and development of coal, oil, gas, locatable minerals and mineral materials.

Table 2.1 identifies by county, the acreage segregated from mineral entry. Table 2.2 identifies the *federal subsurface* acreage within the *Upper Missouri National Wild & Scenic River* (UMNWSR) and wilderness study areas (WSA) that is closed to mineral leasing and location.

TABLE 2.1
ACREAGE SEGREGATED FROM MINERAL ENTRY AND LEASING[1]

County	Acres
Blaine	21,479.62
Hill	0
Chouteau	26,907.33
Liberty*	569.67
Toole	0
Glacier	0
Fergus	20,326.20
TOTAL	69,282.82

*Acreage contained in the BR withdrawal in the Sweet Grass Hills - All other acreages are in wild segments of the UMNWSR

[1]BLM, 1987

TABLE 2.2
ACREAGE MANAGED UNDER A DISCRETIONARY NO LEASE POLICY[1]

County	Acres
Blaine	19,448.73
Chouteau	5,343.66
Fergus	11,958.44
Phillips	4,634.40
TOTAL	41,385.23

All acreage is within the scenic and recreational sections of the UMNWSR Corridor and WSAs.

[1]BLM, 1987

Appendix 2.1 contains a Solicitor's opinion which explains BLM's mineral leasing program within the UMNWSR. *The BLM's interpretation of this Solicitor's opinion is that new regulations which deal with the management priority given to recreation and preservation must be developed at the Washington Office level before leasing can occur in the scenic and recreational segments of the UMNWSR. Until the Secretary of the Interior directs BLM to take action to develop the needed regulations and lease terms that would lead to an active leasing program for non-wild segments, the closure will remain in effect. If and when the regulations are developed, the RMP would be amended to provide guidance for leasing.*

Any new exploration activity will avoid, to the maximum extent possible, the "seen area" of the management corridor, and will utilize accepted principles of landscape architecture to minimize all visual impacts, both permanent and temporary. BLM will work with operators, concerning seismic activities, to mitigate adverse impacts to resources.

These stipulations do not dictate surface management. The mitigation measures present no restrictions on surface activities conducted for purposes other than those mineral development activities which are permitted, licensed, or otherwise approved by the Bureau of Land Management.

Private surface owners will have the opportunity to comment on the permitting process at Application for Permit to Drill (APD) time. Negotiations between the surface owner, operator and BLM may be undertaken prior to APD approval to incorporate the surface owner concerns.

Applications for Permit to Drill and Sundry Notices will normally be processed according to the terms and stipulations of the lease. However, lease stipulations may be waived by the authorized officer if the identified resource is not present at the drilling site, or if BLM determines that operations can be conducted without causing unacceptable impacts. This waiver can be granted at the authorized officer's discretion.

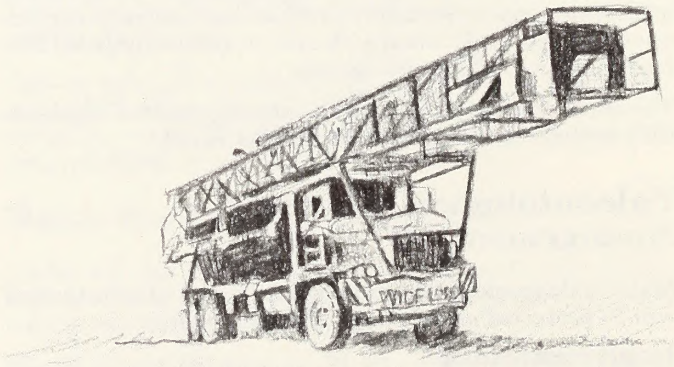
Coal licenses for exploration and small scale use *may* be granted after a complete environmental review by resource specialists and the development of environmental constraints.

Access across federal surface to mining claims will be allowed after an environmental review of the Notice or Plan. Access *is an implied right* under the mining laws, but may be conditional to prevent unnecessary and undue degradation.

Surface management of locatable mineral development on public lands will be guided by the 43 CFR 3809 regulations and the Memorandum of Understanding (MOU) between the Montana Department of State Lands (DSL) and BLM. The 43 CFR 3802 regulations will regulate locatable mineral development in wilderness study areas.

Disturbance exceeding the casual use level, (usually involving mechanized equipment) but less than 5 acres, *occuring outside of the areas listed in 43 CFR 3809.1-4*, may proceed 15 days after a Notice is filed with the BLM District Office.

Disturbances greater than 5 acres require filing a Plan of Operations and receiving approval before work can begin.



Implementation

The current oil and gas leasing policy will continue. Appendix 1.3 describes the current oil and gas leasing, exploration, development and abandonment procedures as well as the expected extent of this program during the life of this plan.

The standard stipulations in Appendix 2.2 will be applied to all oil and gas leases issued. Special stipulations will continue to be added to leases in special areas that were identified prior to and during this planning effort. In addition, the final RMP decision may require a special stipulation incorporating all or part of the Rocky Mountain Front Raptor Guidelines (see Appendix 2.2) in the Kevin Rim and Sweet Grass Hills. In all cases, the stipulations prescribed for federal mineral development in split estate situations apply only to the development of the federal minerals.

A Plan of Operations must always be filed, regardless of disturbance acreage, and formal approval received from BLM prior to surface disturbance in wilderness study areas (WSA), areas of critical environmental concern (ACEC), and other areas listed in 43 CFR 3802 and 43 CFR 3809. In these areas the MOU with DSL does not apply and BLM *is* responsible for developing mitigating measures and plan approval.

Once a Plan of Operations is filed with the BLM, the proposed action will be analyzed (with DSL, where appropriate) and the mitigating measures needed to prevent unnecessary and undue degradation will become conditions of approval. *Plans of Operation are federal actions that require federal authorization. The public may review and comment on these specific plans. For operators covered by the MOU with the DSL, formal approval is granted by DSL with BLM concurrence.*

In WSAs, the non-impairment criteria *in the Interim Management Policy* will determine needed mitigating measures. The mitigation required will be consistent with provisions of the 43 CFR 3802/3809 regulations and with the guidance in this document to protect the public resources.

Vegetation Management

Under all alternatives, the BLM will maintain the public lands that are in satisfactory *(good or excellent)* ecological condition. On public lands with unsatisfactory *(fair or poor)* ecological condition, BLM will manage according to multiple use objectives based on ecological site potential for specific uses. These objectives will be economically and biologically feasible.

Livestock is allocated *108,355* animal unit months (AUMs) *of forage* each year from the public lands in the planning area: *6,631* AUMs in the Great Falls Resource Area; *86,092* AUMs in the Havre Resource Area; *10,001 AUMs in the Judith Resource Area; and 5,631 AUMs in the Phillips Resource Area. Of the total AUMs allotted to livestock, 22,841 are found along the UMNWSR (these revised figures represent a mathematical error in the draft, not a change in allocation).*

Established allocations will be monitored for actual use, utilization, and trends in condition. The monitoring guidelines can be found in the Great Falls Monitoring Plan, the Judith Monitoring Plan, the Phillips Monitoring Plan and the Natural Resource Monitoring Plan for the Havre Resource Area. These plans are available at the respective offices.

All allotments in the planning area have been assigned to a management category *according to* the resources and problems contained in the allotment. Appendix 2.3 lists the management category, AUMs allotted, range condition and season-of-use for allotments in the planning area.

All unallocated parcels will remain available for livestock grazing. Allocations and administration of livestock grazing will occur as provided for in 43 CFR 4100. An environmental assessment will be prepared *before grazing begins* for areas not previously grazed by livestock. Grazing allocations on acquired lands will be based on management needs and reasons for acquisition. The allocation may range from zero to full capacity and will be made on a yearly basis, *or in accordance with a completed* activity plan.

Wildlife is currently allocated 79,260 AUMs within the planning area. However, populations will be allowed to expand into existing habitat. The BLM will cooperate with Montana Department of Fish, Wildlife and Parks *and landowners* to determine habitat and population size.

All vegetation increases will be allocated to watershed until soils are stabilized to a satisfactory condition as determined by an interdisciplinary team prior to increasing livestock or wildlife allocations.

Forest products are available for sale outside of wilderness study areas and the Upper Missouri National Wild & Scenic River Corridor. The sale of forest products may be permitted by negotiated sales in the remainder of the planning area. The only timber tracts managed as commercial stands (those included in the annual allowable cut calculation) are located in the Bear's Paw Mountains.

The BLM *is required* to take *appropriate* suppression action on all fires occurring on public lands. A fire management plan *will be prepared* for each resource area and the UMNWSR Corridor. *These plans will define the degree of suppression necessary and will discuss the use of fire as a management tool.*

Fire is a viable, economical tool *that* will be considered in vegetation manipulation projects. Each resource program will identify areas where prescribed fire can be used to achieve vegetation management objectives.

Soil and Water Implementation (Vegetation Related)

Allotments in predominately fair ecological range condition should have grazing methods which periodically defer early use (April 1—May 15). Grazing methods and land treatments (keyed to specific soil subgroups) in selected areas will be implemented *as necessary*, to improve cover and reduce soil compaction.

Surface disturbance will be successfully revegetated *to* 90% predisturbance condition. If *this level of* revegetation is not expected to occur naturally within 3 years, the BLM will require the initiating party to rehabilitate the disturbance at the time the project is completed. Revegetation species will be determined during the site specific environmental analysis phase.

A minimum rest period of two growing seasons will be required after any major disturbance to vegetation communities. More rest may be required depending on the situation. Major disturbances are defined as mechanical manipulation of rangeland, i.e., seeding, chiseling and fire (wild or prescribed). Specific timing and the type of rest will be determined at the site specific environmental assessment phase for small disturbances.

Riparian Area *Management* Implementation (Vegetation Related)

All manageable riparian areas will have management plans implemented by the year 2001 to maintain, restore, or improve riparian areas to achieve a healthy and productive ecological condition for maximum long-term benefits and values. This goal is stated in the Montana Riparian Management Strategy, *which is available in most BLM offices.*

Allotment management planning will be done on an aggregate basis by considering riparian areas and their watersheds as a unit and may involve more than one AMP. Riparian habitats may require site specific management strategies including establishing riparian pastures, stream corridor fencing, specialized grazing methods, winter grazing use, a different species of livestock and rehabilitation measures.

Management objectives will be applied to the riparian areas along the following streams and rivers: Lodge Creek, 30-mile Creek, Bullwhacker Creek, Woody Island Coulee, Corregan Coulee, Cow Creek area, East Fork Battle Creek, Savoy Creek, Irvins Coulee, Sand Coulee, Lyons Coulee, the Missouri River, Marias River, Cut Bank Creek, and Battle Creek. *This is not an all inclusive list.* Management will be implemented to obtain 90% of optimum streambank cover within 4-10 years *after implementing the activity plan.*

Livestock grazing in specialized, high-use recreation sites along the Upper Missouri National Wild and Scenic River will be controlled through fencing and/or selective grazing.

Allotment management plans (AMPs) will be developed or revised to include specific objectives for the improvement and maintenance of riparian areas. In some cases, additional site specific data may be needed before development or revision of an AMP can begin. In most cases though, site specific *information* is adequate to proceed with developing alternatives for protecting and managing these areas. On-the-ground *impacts* of livestock grazing will be determined through monitoring and evaluating these areas to determine if objectives are being met.

Measures to mitigate environmental impacts presented in the Missouri Breaks Grazing Environmental Impact Statement (EIS) *and Prairie Potholes EIS* will be observed. This will include the use of an interdisciplinary team to review the location of all proposed projects and an inventory of riparian habitats to determine appropriate protection measures.

All high value waterfowl and fisheries reservoirs will be evaluated to determine the need for *permanent or temporary* fencing to promote riparian vegetation establishment. These areas will be monitored and when the riparian vegetation is well established, returned to management under a grazing method designed to protect the vegetation community. Other areas may need fencing to restore the riparian community.

Management plans *will* be written or revised to contain riparian objectives to maintain or improve existing riparian communities and to develop potential riparian areas. *Grazing permittees/lessees and other interested groups or individuals will have the opportunity to review the development of these objectives.* Management prescriptions *will* be based on intensive grazing systems to achieve better livestock distribution and upland use.

Temporary livestock exclosures, to protect riparian communities, may be necessary when other management actions do not allow seedling establishment of riparian species. Alternate water sources would be provided if primary sources are denied. They would only be in place until riparian species seedlings are vigorous enough to withstand proper grazing use as determined by monitoring. Where feasible, riparian pastures will be established to allow rehabilitation of riparian areas, while still allowing the proper use of grazing AUMs.

Pastures with riparian areas would not be grazed by livestock during the hot season more than 1 year out of 3 in order to maintain or improve riparian communities to a satisfactory condition (i.e., narrow stream channel, raise the water table, or increase woody vegetation to maintain 90% canopy cover). Riparian pastures outside the UMNWSR Corridor *may* be grazed *during* the cool season (May 15—June 30) to maintain or improve woody vegetation. *This stipulation could be altered if monitoring studies indicate impacts would be avoided, or caused, by this management method.*

As new information on riparian grazing becomes available, these guidelines may be changed.

The following known saline seeps will be evaluated and fenced if necessary to reclaim the seep: BR-10, BR-14, BR-31, BR-42, BR-48, BR-52, BR-71, BR-115, Bend, Nathan, Honker, O.K. and Change Reservoirs. Other saline seeps will be evaluated to determine management needs.

All existing and future riparian exclosures will be monitored *and evaluated for future removal.* At that time, AMPs will be revised to *provide* management *prescriptions* to maintain the riparian community condition.

The major riparian areas *within the UMNWSR*, listed in Appendix 2.4, *will* receive priority for intensive management during the life of this plan.

Potential riparian sites within the UMNWSR Corridor will be inventoried and *the Coordinated Resource Activity Plan for the UMNWSR will specify management objectives for these sites.*

The BLM will continue to manage Two Calf, Dillon Island and Grand Island Natural Areas within the UMNWSR in cooperation with the Charles M. Russell National Wildlife Refuge (CMR).

Forest Management Implementation (Vegetation Related)

All forest product sales will undergo an environmental analysis during the site specific evaluation phase.

Recreational use of forest products within the UMNWSR Corridor will be limited to dead-and-down material.

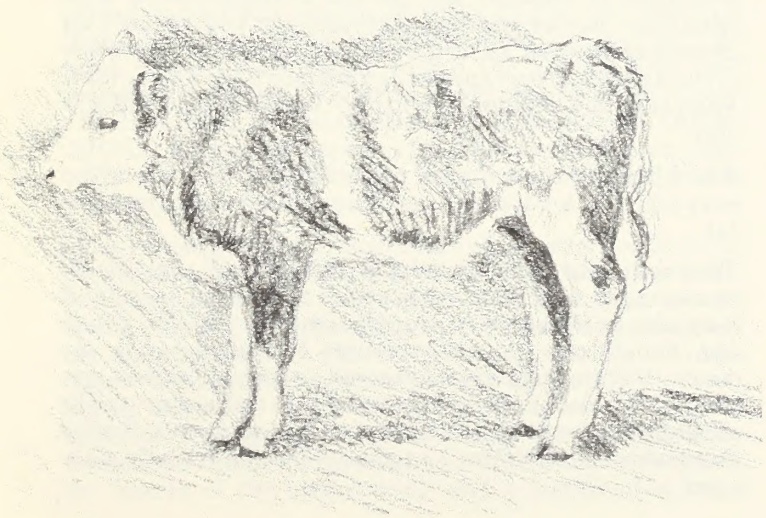
Wildlife & Fisheries Implementation (Vegetation Related)

The BLM will maintain a diversity of forbs, grasses and shrubs on antelope range through proper livestock stocking rates and grazing methods.

Grazing methods will be used to maintain good or excellent forage and cover among grasses, forbs and shrubs on 5,100 acres of crucial elk habitat in the Sweet Grass Hills to support approximately 150 elk.

The BLM will use grazing methods to enhance bighorn sheep habitat and allow their expansion in the Missouri Breaks.

Livestock grazing methods (which may include the termination of grazing by October 31) will be used to maintain sagebrush stands with 15-50% canopy cover and 15 inches in height within 2 miles of sage grouse leks.



Grazing Management Implementation (Vegetation Related)

Allotment management plans will be developed with multiple-use objectives to enhance vegetation production; maintain and enhance wildlife habitat; protect watersheds; reduce bare ground to the target soil vegetation cover by soil subgroups (see Chapter 3 and Appendix 2.5); and to minimize livestock/recreation conflicts.

Allotment management plans will implement some form of grazing method (i.e., rest rotation, deferred rotation, seasonal or other methods). Appendix 2.3 shows the *current* AMP status for the entire planning area. Grazing management methods will be implemented prior to mechanical treatments, unless it is clear that grazing practices alone will not reach management objectives.

Existing AMPs will be updated as dictated by monitoring results or changes in the livestock operation.

Monitoring data and analysis will be used to ensure grazing management is reaching its objectives. The monitoring data and analysis will be used to allow temporary increases or decreases in AUMs and to revise AMPs.

Allotments grazed between March 1 and May 31, will be evaluated in accordance with the Resource *Area* Monitoring Plans. *This direction will be found in the Natural Resources Monitoring Plan for the Havre Resource Area; and the monitoring plans for the Great Falls, Judith and Phillips Resource Areas.* If problems (such as adverse impacts to watersheds and/or wildlife) are identified, the AMP will be revised to mitigate the impacts.

Section 15 leases will be monitored according to the schedule in the resource area monitoring plan. Livestock adjustments will be made depending on the results of monitoring and inventory.

Crested wheatgrass seedings will be maintained for maximum livestock forage production; 70% of the production may be allocated to livestock when soils are stabilized to a satisfactory condition. Existing seedings will be fenced and restored to maximum production to allow for manageable pastures, *if an analysis indicates such management is feasible.* Additional crested wheatgrass seedings may be used to consolidate existing scattered stands of crested wheatgrass into a manageable unit. In addition, new seedings will be allowed on allotments where no other option is available to improve the vegetative condition.

Vegetative *manipulations* will be planned, developed and implemented to ensure that negative impacts to other resources (wildlife, soils, range, and watershed primarily) are identified and mitigated. Treatments will be applied if maintenance or improvement cannot be achieved with grazing management practices. Watershed parameters, topography, soil type, infiltration, and soil loss potential will also be considered and mitigated, as necessary, in vegetation manipulation projects.

Blue grama-clubmoss rangelands may be treated by mechanical means (i.e., chisel plowing or scalping) where improvement cannot be attained by using a grazing method.

The Ervin Ridge Wild Horse Herd Area, *identified under the Wild Horse and Burro Act*, would remain free of wild horses, as directed by the 1985 South Bearpaw Management Framework Plan (MFP) amendment.

The BLM will control, eradicate and/or contain noxious *plant* infestations on public lands under cooperative agreements with county weed boards. *The BLM is concerned with the spread of noxious plants by off-road vehicles, livestock, wildlife, birds, humans, water, contaminated seed or hay, wind and machinery.* If weed problems occur in a checkerboard ownership pattern, the BLM will initiate control measures in conjunction with the other landowners.

The containment/eradication of noxious *plants* will proceed as analyzed in the *Northwest Area Noxious Weed Control EIS and Supplement (1985, 1987) and the* Programmatic Environmental Assessment on Containment/ Eradication of Selected Noxious Plants in the BLM Lewistown District, May 1986. *All activity plans will address noxious plant management as necessary.*

Fire Management Implementation (Vegetation Related)

The North Fergus Modified Suppression Plan is the only fire management plan in the area. Information will be compiled to develop fire management activity plans/environmental assessments (EAs) for each resource area. Economics, low resource values and difficult suppression *terrain will be the criteria used to identify limited suppression areas .*

All wildfires within the UMNWSR Corridor will receive an initial attack unless a modified suppression plan is in effect.

Standard mitigation measures for maintaining the vegetation communities are found in Appendix 2.6.

Wildlife & Fisheries Management

The BLM will maintain and enhance habitat for wildlife. The emphasis for habitat maintenance and development will be placed on present and potential habitat for sensitive, threatened and/or endangered species, nesting waterfowl, *game birds*, fisheries and crucial big-game winter ranges.

General forage allocations and habitat decisions for wildlife can be found under the Vegetation Management section of this chapter. The Montana Department of Fish, Wildlife and Parks is responsible for population management. The BLM has made some habitat *management* decisions to support the populations identified by the MDFWP *and those decisions are identified below.*

Implementation

The BLM will minimize or prevent road and trail development on crucial deer and sharptailed grouse habitat areas.

Habitat enhancements (islands, nesting platforms) will be constructed on new or existing reservoirs, ponds, potholes or river systems where feasible.

Easements on or across public land for the development of private water sources will carry stipulations to enhance waterfowl habitat, *as feasible.*

Livestock water developments will not be built on the terminal portions of finger ridges in the Missouri Breaks *if analysis identifies* deer/livestock competition.

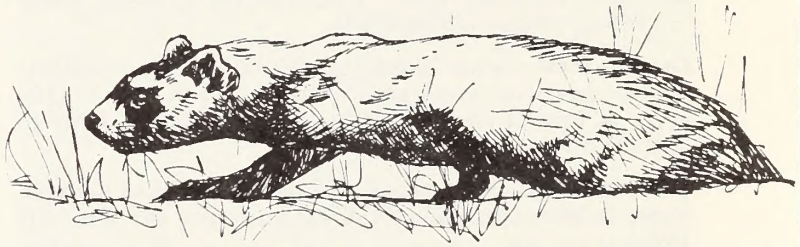
Expansion of big-game populations into existing but previously unoccupied habitat *may occur. The BLM will work with MDFWP, landowners and grazing permit holders to determine management practices, if monitoring indicates decreases in range condition in herd expansion areas. These practices may involve reducing grazing AUMs, reducing wildlife populations or other management options.*

A cooperative agreement to transplant bighorn sheep into Little Bullwhacker, Cow Creek and Bull Creek will be pursued with the MDFWP. No changes in livestock class from cows to domestic sheep will be allowed in areas occupied by bighorn sheep.

Identified great blue heron and cormorant rookeries on *BLM-administered* public lands will be protected from roads, campsite developments, timber cutting and other intrusions. *No disturbance will be allowed within 1,000 feet of rookeries from the start of nesting through the fledging of young birds.*

Underwater rights-of-way crossing the Missouri River will be constructed between June 15 and August 15, to protect spawning paddlefish. Other mitigation to protect spawning paddlefish will be applied as necessary.

No action will be initiated on *BLM-administered* lands which will jeopardize any federally listed threatened and endangered (T&E) plant or animal. Impacts to other sensitive species and state designated species of special interest will be evaluated *and applicable mitigation developed* prior to the initiation of any action on public lands.



The BLM will work with the U.S. Fish and Wildlife Service (USFWS) to recover threatened and endangered species, including reintroduction efforts. The species of interest are the bald eagle, peregrine falcon, *black-footed ferret* and piping plover.

The BLM will carry out management, consistent with the principles of multiple use, for the conservation of ESA candidate species and their habitats and will ensure that actions authorized, funded, or carried out do not contribute to the need to list any species as T&E (see BLM's Candidate Species Policy, September 27, 1987, available at BLM offices).

The BLM will consult with the USFWS when any action may affect a threatened or endangered species or its habitat.

The prairie dog town located in T. 33 N., R. 22 E., Sec. 28 will be managed to provide habitat for associated species. It may also be managed to provide some recreational shooting. Should any control measures be considered in the future, threatened and endangered or special interest species will be given priority, and necessary mitigation will be developed prior to initiating any control measures. Prairie dog towns smaller than 10 acres will not be actively managed.

Recreation Management Implementation (Wildlife & Fisheries Related)

Consistent with the 10-year cooperative Fish Management Plan between the BLM and the Montana Department of Fish, Wildlife and Parks, the MDFWP will be requested to stock the following reservoirs with fish: South Cassidy, Reser, BR-12, Don, North Faber, Salmo, Butch, F. R., Carol, Ridge, Zero, Gezob, and Diane. In the future, other reservoirs may be identified for fisheries management. Priority consideration will be given to reservoirs near *communities*. Consideration of fisheries potential will be given during the design phase of new reservoirs.

Standard mitigation measures to *minimize disturbances to* wildlife resources are found in Appendix 2.6.

Cultural Resource Management and Protection of Traditional Cultural Values

All alternatives will provide for the enhancement and protection of cultural resources and the protection of traditional cultural values. Cultural resources are defined as those fragile and non-renewable remains of past human activities. For the purpose of this document, traditional cultural values are restricted to Native American religious activities.

Implementation

Cultural resources will be given full consideration in all land use planning and management decisions. The BLM will seek to ensure its undertakings avoid inadvertent damage to both federal and non-federal cultural resources.

The BLM will seek to preserve a representative sample of the full array of cultural resources for the benefit of scientific and socio-cultural use for present and future generations.

All BLM actions which may *impact* cultural resources will comply with the National Historic Preservation Act of 1966, as amended and as implemented by 36 CFR 800. This legislation and regulation (called *the* Section 106 process) requires the following steps be taken before initiation of BLM actions:

Prior to *the implementation of* any federal *action all* cultural resources listed *or eligible for listing* on the National Register of Historic Places (NRHP) must be identified. Cultural resources identified within the project area and potentially affected by a BLM action are evaluated in consultation with the State Historic Preservation Officer (SHPO). Agreement between the BLM and SHPO on eligibility constitutes consensus, permitting the compliance process to proceed.

Once consensus exists, the nature of the effect on historic properties is determined. One of the three following determinations are made: (1) No effect—the agency, in consultation with SHPO, determines the federal undertaking will not impact eligible cultural resources. (2) No adverse effect—the agency, in consultation with the SHPO, determines there will be an effect but the effect will not be adverse. The agency submits *a report* to the Advisory Council on Historic Preservation (ACHP) which describes the nature of the undertaking and a justification for a determination of no adverse affect. The ACHP, may concur, object with conditions (project may proceed if conditions are met) or object (in this case a consultation process is initiated among ACHP, the agency and SHPO). (3) Adverse effect—when the agency determines the effect on cultural resources will be adverse, the agency, SHPO, and the ACHP will consider ways to avoid or mitigate the impact of the federal undertaking on cultural resources. Measures considered during consultation may include preservation of the cultural resource, restoration (restoring, repairing) of the cultural resource, documentation (photographs, drawings, and histories of buildings and structures), reducing the magnitude of the undertaking, redesigning the project, and data recovery (refers to archaeological sites where data may be recovered through controlled excavation). Once the consulting parties agree on the measures to avoid or mitigate the impact to eligible cultural resources by the federal undertaking, and the conditions or stipulations have been met, the project may proceed.

The procedures outlined above have been modified in portions of the RMP area by agreement between the BLM and the Montana SHPO. These modifications have reduced the need for cultural resource surveys to identify sites possibly eligible for the National Register of Historic Places.

BLM requires that all persons conducting cultural resource fieldwork on public lands obtain a cultural resource use permit from the Montana State Office. The District Manager authorizes and is responsible for monitoring the fieldwork proposed and actually conducted. This is accomplished through the fieldwork authorization process.

Activity plans may be developed for significant cultural resources on public lands. These plans will be written for sites evaluated through the BLM cultural resource use evaluation system. The cultural resources use categories are described in Appendix 2.7. Sites assigned a use category will be managed to achieve that use.

BLM has a clear responsibility and mandate to manage the cultural resources along the Upper Missouri National Wild and Scenic River for both preservation and enhancement. This direction has been developed into a series of management plans, including a Cultural Resource Management Plan. Specific prescriptions for management of the cultural resources along the Upper Missouri National Wild and Scenic River will consider that:

1. Historic sites will be evaluated and then monitored or maintained based on; their historic value, the attraction they have for visitors and their use as safety shelters.

2. Prehistoric sites will be evaluated and then monitored, protected or excavated based on their scientific value and what they can add to knowledge and interpretation of the UMNWSR.

3. Historic and archaeological opportunities along the UMNWSR will be enhanced by developing interpretive potential at selected cultural sites. Resources will be selected based on access, information potential and the potential to provide important parts of river history or prehistory via interpretation. These enhancements *will* be subject to any constraints of the final RMP.

Standard mitigating measures to protect cultural resources are listed in Appendix 2.6. These measures will be applied, as *necessary*, to all federal actions.

Implementation for Traditional Cultural Values

The Bureau will ensure that its actions, or actions that it permits or licenses do not wrongfully infringe upon Native American religious rights.

As required, the Bureau will consult with Native American tribes when its actions have the potential to affect areas of concern to practitioners of traditional religions. In the RMP area, that consultation will require contact with the Blackfeet, Rocky Boys and Fort Belknap Reservations. The activities of concern *are those which* might cause degradation to the visual or aesthetic nature of an area, *or* cause loss of plant species or other resources important to Native Americans.

Recreation Management

Under all alternatives, the BLM will maintain the recreational quality of public lands by providing opportunities for fishing, hunting, sightseeing, hiking, snow sports and other outdoor opportunities.

The BLM will maintain and enhance the recreational and visual quality of public lands along river systems in the planning area.

The wilderness values in three identified wilderness study areas *(WSA)* Stafford, Ervin Ridge, *and* Cow Creek will be maintained. The Secretary of the Interior is required to report his recommendations *for Sec. 603 and suitable Sec. 202 WSAs* to the President by October 21, 1991, and the President is required to report his recommendations to Congress by October 21, 1993. Congress ultimately decides whether to designate *study* areas, *or portions of study areas* as wilderness. *Any non-suitable Sec. 202 WSAs may be dropped from further consideration by a Record of Decision issued by the State Director.*

The quality of the scenic (visual) values on public lands throughout the RMP area will be maintained *following visual resource management (VRM) guidance.*

The Upper Missouri National Wild and Scenic River will be managed to protect and preserve the remarkable scenic, recreational, geological, fish and wildlife, historic, cultural, and other values as directed by Congress in the *Wild and Scenic Rivers Act* (PL 90-1968) and the amendment for the Upper Missouri (PL 94-486, 1976). *The BLM will continue to coordinate its management responsibility for the UMNWSR with the National Park Service's (NPS) Rocky Mountain Regional Office, which oversees all wild and scenic rivers* and with the NPS's Mid-west Regional Office in managing the Lewis and Clark National Historic Trail. The BLM will manage the segment of the Lewis and Clark National Historic Trail within the planning area, in a manner that is consistent with the purposes and provisions of Public Law 90-543 (the National Trail Act) as amended by Public Law 95-265 *and the comprehensive plan prepared by the NPS in 1982. The BLM will manage the segment of the Nez Perce National Historic Trail within the planning area in a manner consistent with the purposes and provisions of Public Law 90-543, as amended by Public Law 99-445 and the comprehensive plan being prepared by the USFS.*

Implementation

The BLM will provide recreation access maps and brochures for recreational use of the public lands and to promote better sportsman/landowner relations.

The BLM will strive to improve public access to rivers at road and highway intersections and to acquire lands to enhance recreational opportunities. Other developments may be allowed, based on public demand and BLM recreational studies. Management priority will be on the Missouri and Marias Rivers.

Roads, trails and public lands will be signed *where necessary and appropriate*, to aid people recreating on public lands. Priority will be given to *areas of* intensive use.

Recreational use studies will be conducted on a continual basis to determine areas *of intensive use* and future access needs.

A pack in/pack out policy at recreation sites will be implemented.

All acquired lands will be evaluated for wilderness values as part of the lands review process.

The Sec. 603 wilderness study areas *(Cow Creek and Ervin Ridge)* will continue to be managed in compliance with the Interim Management Policy (IMP) until they are reviewed and acted upon by Congress. *The non-suitable Sec. 202 WSA (Stafford) will be managed under the Interim Management Policy until a Record of Decision from the Missouri Breaks Wilderness EIS is issued by the Montana BLM State Director. After the 202 decision is issued, the management prescriptions and objectives applicable to the contiguous non-wilderness land, as identified in this RMP, will apply to this WSA.*

Acquired areas studied for wilderness will be managed to prevent unnecessary and undue degradation of the land, and when it does not conflict with valid and existing rights, they will be managed to meet the non-impairment standard as well.

The *final* Missouri Breaks EIS recommended 21,590 acres of the 34,050 acre Cow Creek WSA as suitable for wilderness designation. *Of this 21,590 acre suitable portion, 10,500 are within the RMP planning area.* None of the 4,800 acre Stafford WSA or 10,200-acre Ervin Ridge *WSA* were recommended as suitable. More information on these WSAs can be found in Appendix 2.8 and the *final* Missouri Breaks Wilderness EIS *(December 1987).*

WSAs added to the National Wilderness Preservation System by Congress will be managed in compliance with the Wilderness Management Policy. Site-specific wilderness management plans will be developed for *these WSAs*.

Those WSAs reviewed by Congress, but not added to the National Wilderness Preservation System will be managed under the applicable guidelines in this Resource Management Plan.

Surface developments will be designed or mitigated to complement and harmonize with the natural features and the Visual Resource Management Class objectives. The visual contrast rating will be used as a guide for all major projects proposed on public lands that fall within VRM Classes I, II, and III areas which have high sensitivity levels.

Existing VRM data will be updated for the Missouri Breaks *Grazing* EIS *portion of* the planning area.

Implementation Within the Upper Missouri National Wild and Scenic River (Recreation Related)

BLM will revise and update the Coordinated Resource Activity Management Plan known as the Upper Missouri National Wild & Scenic River Plan, to implement the guidance provided by this RMP. The BLM will coordinate with the U.S. Fish and Wildlife Service on bankside recreation use and management within the Charles M. Russell National Wildlife Refuge boundaries, *between* river miles 139-149.

In Class I VRM areas (wild sections of the UMNWSR Corridor) the level of change to the natural landscape from management activities should be very low and must not attract attention.

In the scenic and recreational sections of the UMNWSR Corridor (Class II VRM areas), management activities may be seen, but should not attract the attention of the casual observer.

Both motorized and non-motorized watercraft will be permitted in all river segments. There is a no-wake speed limitation during the primary recreation use season for the wild and scenic river segments. A no-wake speed is defined as the speed whereby there is no whitewater in the *wake* of the vessel or in created waves immediate to the vessel.

Hazardous Waste Management

The BLM would not permit the establishment of a hazardous waste dump on public lands under any of the alternatives.

Implementation

Lands needed for the disposal of hazardous wastes will be identified and made available through sale or exchange to the private sector for this purpose.

Land Resource Management

Under all alternatives the BLM will continue to identify areas with legal access and those areas lacking legal access. Access will then be addressed in an activity plan that will identify specific tracts or routes for acquisition. Acquisition needs will be identified by individual program activities and public involvement. Access needs identified at this time, for administrative purposes, include the Kevin Rim area, the Sweet Grass Hills and the Marias River.

The BLM will continue withdrawal review as provided for under *the* Federal Land Policy and Management Act (FLPMA) and Department Manual 603.

BLM will take aggressive action on any unauthorized agricultural use of public lands. Emphasis will be on detection/resolution and publication of the results of those activities. Inventories of unauthorized agricultural use will be initiated and completed, where not already current. A plan for abatement will be a priority in the future budget developments. Emphasis will be given to immediate resolution of newly identified unauthorized uses; termination or authorization, as appropriate. Administrative processes will seek fair-market value land use compensation, damages and/or land restoration.

Implementation

A transportation plan will be updated to identify existing legal access to public lands as well as areas where public access is lacking. Access will then be addressed in an activity plan that will identify specific tracts or routes for acquisition. Acquisition needs will be identified by individual program activities and through public involvement.

Access will be obtained to provide more recreation in the recreational and scenic portions of the UMNWSR Corridor. Priority will be given to: Evans Bend at river mile 6; launch/takeout sites; Black Bluff Rapids; and bankside use areas. Other access will be obtained as needed. The only new *motorized* access allowed in the wild portions of the UMNWSR Corridor will be to provide required access *by a claimant* to valid, existing leases. *Non-motorized access will continue to be pursued.*

The BLM recommends revoking the power site classification and power site reserve number 757. These power site classifications and reserves are within the UMNWSR where legislative actions preclude water power and water storage development. Other power site classifications and power site reserves will be reviewed to determine if the withdrawals are still valid.

If a withdrawal (including power site withdrawals) is terminated, the lands will be assessed for retention or disposal qualities *using the guidance provided in Appendix 1.1 of this document.* If these lands are retained, they will be managed under the guidance provided for the surrounding or nearby lands or for the specific values on the lands.

Distribution facilities (electrical systems, pipelines, roads, railroads, etc.) will be encouraged *within a 1-mile corridor along* existing facilities *where appropriate.*

Land acquisition will be for lands of *equal or* greater resource values than those lands disposed *of.* Acquired lands will be placed under the guidance found in this Resource Management Plan. Lands acquired through fee simple title or easement in a designated emphasis area (i.e., the Upper Missouri National Wild and Scenic River Corridor, WSAs, *ACECs*) will be managed under the specific management guidance for the area. *ACEC boundary changes, necessitated by land-resource acquisition, would occur to clearly define the emphasis area limits.*

Before the acquisition of private or state land and the disposal of public land, the criteria in Appendix 1.1 would be applied. A land report (Environmental Analysis, Notice of Realty Action) would be written for each disposal action. A land report for a sale would have to show how the FLPMA Sec. 203(a)(1) sale criteria applies. A land report for an exchange would have to show how the public interest is benefited as required by FLPMA.

ALTERNATIVES

This section describes four different alternatives *designed* to resolve the issues discussed in Chapter 1. Alternative A represents the No Action or Continuing Current Management Alternative; Alternative B presents a combination of management guidance and actions that favors the use of public land resources; Alternative C presents a combination of management guidance and actions favoring the protection and preservation of public land resources; and Alternative D presents a balance of management guidance and actions *described* in the previous three alternatives.

These alternatives were developed as reasonable combinations of resource uses and management practices to respond to the planning issues. Each alternative, combined with the Management Common to All Alternatives guidance *would* provide management direction for all resources.

Maps showing allocation differences between the alternatives for land tenure adjustment, ORV management and ROW location are located in the back of this document. Map 1 *identifies surface land status* and the *minerals* overlay *for it* identifies *federal subsurface* and constraints to minerals management. Map 2 *and the attached table* show the land tenure adjustments for Alternative A. Map 3 shows the land tenure adjustments *for* Alternatives B, C and D. Map 4 *used in combination with the table printed on it* shows the ORV management options and ROW locations for all the alternatives. *Map 1, the minerals overlay and Map 2 along with Maps 3 and 4 are found in the draft RMP EIS. Maps 3 and 4 have been updated and reprinted in this document.*

ALTERNATIVE A (NO ACTION)

This alternative represents a continuation of present management direction. It would continue to implement policies, regulations, and decisions from five management framework plans, several grazing environmental impact statements a wilderness EIS, various programmatic environmental assessments, activity plans, and the State Director's Guidance for *Land Pattern Review and Land Adjustment (1984).* This alternative serves as a baseline for the comparison of other alternatives. If selected, this alternative plus the guidance given in the Management Common To All Alternatives section would form the RMP.

Land Tenure Adjustment

The BLM would continue to *use* the State Director's Guidance on Land Pattern Review and Land Adjustment (see Appendix 1.1) *to exchange, sell and acquire lands. A total of 44,143 acres are currently identified for disposal, with an emphasis on exchange.* The emphasis of this guidance *would be* to attain a land pattern conducive to ease of management or optimum utilization of resources. This is generally achieved through managing large blocks of public surface lands. Land adjustment actions would generally dispose of lands outside the retention areas identified on Map 2 in the back of *the draft RMP however*, land exchanges may be considered within the retention areas. Acquisition lands would *have to* meet the criteria found in Appendix 1.1.

Implementation

Land adjustment would be achieved through state *and* private exchange, *donation, purchase under the Land and Water Conservation Fund (L&WCF)*, the Recreation and Public Purposes Act (R&PP), *public land sale*, and mineral exchanges. A land report *EA* would be completed for each *action.*

Acquisition tracts would generally be in areas of major federal holdings such as the Missouri River Corridor, northern Blaine County, the Sweet Grass Hills and other areas within and outside of the planning area.

Off-Road Vehicle Management

The BLM would continue to allow unrestricted off-road vehicle (ORV) use under an open designation for the majority of the planning area (477,763 acres). Map 4 in the back of this document *shows* this open area.

ORV use would continue to be limited to existing roads, *trails* and vehicular ways in the wilderness study areas. Under the limited designation, ORVs would *also* be restricted to existing roads and trails in areas of sedimentary breaks soils with slopes greater than 30%. Combined, these areas total 148,335 acres.

ORV restrictions *provide for* administrative access to leases (grazing, mineral or other). Such access would be granted on a case-by-case basis.

Implementation

An ORV implementation plan would be completed. This plan would contain detailed information on roads, *vehicular ways, and* trails open to travel *in limited areas*, on signing the area, and on monitoring use in the area. The BLM would publish and distribute a map of the limited areas *showing* the roads and trails open for use. All limited areas would be signed with an explanation of use restrictions.

Wilderness study areas designated wilderness by Congress would be closed to all vehicular traffic at the time of designation, *except for administrative access as defined in the Wilderness Act.* A portion of the Cow Creek WSA is currently recommended as preliminarily suitable for designation. WSAs which are not designated would be managed under the ORV constraints of adjacent lands, if any apply.

The BLM would acquire access to intensively *used ORV* areas through exchange, easement or purchase.

The BLM would monitor and enforce all designations once ORV implementation plans are completed.

Right-of-Way Location

The BLM would continue to *consider authorization of* lineal rights-of-way throughout the planning area, if an environmental review of each request indicates the impacts may be mitigated.

The entire planning area would remain open to communication site location.

Implementation

An environmental analysis of *any* proposed project would identify stipulations necessary to mitigate impacts to resources. Standard stipulations (see Appendix 2.6) would be used as minimum *stipulations.*

Emphasis Areas

Current management practices and allocations would continue in the Kevin Rim, Sweet Grass Hills and Cow Creek areas. All three areas would be managed for the multiple use of all resources with no additional stipulations, unless needed on a site specific basis *to mitigate impacts to resources.*

Kevin Rim Implementation

Standard protective stipulations *(see Appendices 2.2 and 2.6)* would continue to mitigate surface disturbing activities (primarily oil and gas) and *related* impacts to the raptor and cultural resources. *The standard raptor protection stipulations (see Appendix 2.2) would be applied to the active nests of raptors listed as either T&E or sensitive and would not permit disturbance within 1/4-mile of an active nest. This stipulation would be applied at the APD review stage, if an active nest is found on the lease.* Dates during which raptor nests are *generally active* can be found in Table 3 *of the Rocky Mountain Front Raptor Guidelines (see Appendix 2.2).*

The BLM would continue to require a cultural resource inventory on all surface disturbing projects prior to approval. If cultural resources are discovered, the project would avoid them if possible, or the impacts would be mitigated. Mitigation may involve archaeological excavation.

The BLM would continue to permit rights-of-way in the area if an environmental analysis determines the project can be completed without significant impacts. This determination *would* be made after *the environmental analysis develops* mitigation measures *designed* to modify the impacts.

Sweet Grass Hills Implementation

The BLM would continue to lease and permit *oil and gas* exploration and development under the standard stipulations (see *Appendix 2.2). These stipulations* protect active raptor nests, crucial elk wintering and calving areas *and cultural resources. Currently, the primary disturbance is from oil and gas activity. These stipulations would be applied to the active nests of raptors listed as either T&E or sensitive (see Appendix 2.2) and would not permit disturbance within 1/4-mile of an active nest. This stipulation would be applied at the APD review stage, if an active nest is found on the lease. If the lease is located on crucial wildlife or elk calving areas, seasonal no surface occupancy stipulations may be applied at APD time.*

The area would remain open to operation under the mining laws. Protective wildlife stipulations may be applied to locatable mineral development *when* they are needed to prevent unnecessary and undue degradation.

The standard cultural stipulations (see Appendix 2.6) would also apply to the area.

The BLM would consult with Native American tribes on actions which might impact the area.

The current grazing methods would continue, unless altered by the Great Falls Monitoring Plan.

The BLM has reviewed the East Butte, Bureau of Reclamation (BR) withdrawal *(569.67 acres)* and recommended that 40 acres of the withdrawal be retained and the remaining 529.67 acres returned to BLM administration. The withdrawal was originally granted as a riprap source for reclamation projects. The 40 acres still needed by BR are adjacent to the existing quarry and provide riprap reserves that may be needed in the future. The area revoked from the withdrawal would be opened to mineral entry and would be managed under the management guidance for the area. All other agency withdrawals in the area would be continued.

Cow Creek Implementation

Multiple use management would continue in the Cow Creek area. The BLM in cooperation with the U.S. Forest Service, would write an activity plan for the Nez Perce National Historic Trail; *16 miles of which are located on public land within the planning area.* Minor modifications of the current grazing methods would occur in order to incorporate the riparian guidelines necessary to maintain current riparian areas on Cow Creek.

Surface disturbing activities such as mineral development, right-of-way location and/or range improvements would be subject to the standard stipulations (see Appendices 2.2 and 2.6).

Upper Missouri National Wild and Scenic River Management

BLM manages the Upper Missouri National Wild and Scenic River and its related resources in a manner consistent with providing a meaningful recreational experience for recreational users, while maintaining or enhancing the existing unique quality environment of the management area.

Recreation use including, but not limited to boating, hiking, fishing, and hunting, *would* be permitted to the extent that the wild and scenic characteristics of the Missouri River are not degraded.

BLM management would be consistent with the Wild and Scenic Rivers Act (PL 90-542 1968) and the amendment which designated the Upper Missouri River (PL 94-486, 1976).

Visitor Services *Implementation*

Floater user capacity is based on the amount of public land available for campsites and would remain the same. *No user capacity has been established between Fort Benton and Coal Banks.* The use capacity is 210 individuals/day between Coal Banks and Judith Landing, and is 234 individuals/day between Judith Landing and Fred Robinson Bridge. Minor adjustments would be made if additional, suitable land is acquired. Outfitters *would be* limited to 30% of *the* overall carrying capacity (133 individuals/day).

The visitor contact station in Fort Benton and the ranger stations at Coal Banks and Judith Landing would be operated between Memorial Day and Labor Day. The visitor contact station would be managed under the Memorandum of Understanding with the National Park Service, *or as future legislation may dictate,* to provide visitors with necessary permits and safety information. In addition, the center would provide interpretive information on the natural and cultural history of the river. The ranger stations would provide visitor permits and information and serve as public health and safety contact sites.

All interpretive activities and sites within the river corridor *would* be self guided and keyed to the Floater's Guide. The Floater's Guide increases visitor understanding of *river use* regulations and *the* resources *present* on the river. It provides information on the natural, cultural, historical and geological features of the river. Information or interpretive signs, except hazard warnings visible from the Missouri River, *would* be prohibited on all federal lands *within the wild and scenic segments.*

Recreational use of islands would be discouraged, through visitor contact and publications, during the spring and early summer season to protect young wildlife.

Facility Management *Implementation*

Three categories of recreation sites exist along the river. Undeveloped sites are primitive camping areas used on a regular basis, but lacking capital improvements (i.e., pit toilets). Semi-developed campsites are areas with some capital improvements and camping use is fairly frequent, *but do not qualify for fee collection under the Land and Water Conservation Act (L&WCF) of 1965.* Developed sites are those areas with tent or trailer spaces, potable water, access roads, refuse containers, pit or chemical toilets and qualify for fee collection under the *L&WCF.* These definitions are applicable to all alternatives.

The BLM would continue monitoring and maintenance (i.e., *garbage* collection) on major undeveloped use sites. Those sites along the recreational segment *from Fort Benton* to Coal Banks Landing would be signed to help alleviate trespass problems on private lands.

The existing semi-developed sites would be maintained *and* additional *semi-developed* sites may be *provided* based on the following criteria—

(1) increasing use of the river or of undeveloped campsites;

(2) impacts to soil and vegetation becoming long term; (i.e., heavy use begins to compact soils and kill vegetation beyond acceptable limits) as determined by monitoring;

(3) sanitation becomes a health problem;

(4) more or different sites are needed in order to rest existing sites (to reclaim soils and vegetation at existing sites); and/or

(5) better distribution of use is desired in the more popular areas. Development at these sites *would* be limited to pit or chemical toilets and potable water sources *as these sites would* be developed and maintained to provide a primitive recreational experience.

Developed sites as defined above, would only be allowed at major launch/take out sites in the recreational segments.

The BLM would continue to manage the Montana Fish, Wildlife and Parks Department campgrounds, as provided under agreement with the State of Montana. This includes facilities at Coal Banks Landing, Hole-In-The-Wall, Slaughter River, Judith Landing and Cow Island Landing.

Private Sector Initiatives Implementation

Under this alternative, private sector initiatives would be limited to outfitting, guiding and boat rentals. *Developments associated with these initiatives would be restricted to the recreational and scenic river segments. All developments would be consistent with the Wild and Scenic Rivers Act, as amended, and the guidance selected in this RMP.*

The recreational segment definition in the Wild and Scenic Rivers Act allows for the most development potential. If there is a need established for some type of facility, whether it be BLM or private sector initiative, the merits and economic feasibility would be assessed under the guidance provided in the wild and scenic river legislation, this RMP, and the river coordinated Activity Plan.

Private sector initiatives would be managed under the guidance of this RMP.

Health and Safety *Implementation*

The BLM would continue visitor services to provide for public health and safety. All law enforcement and search and rescue operations would continue as a cooperative effort. Local and state agencies *would* have lead responsibility, *while* BLM *could* provide personnel and equipment *as requested.*

ALTERNATIVE B

This alternative emphasizes the availability of public land for consumptive uses with minimum restrictions. The nonconsumptive resources (cultural, soil, water, air, threatened and endangered species, vegetation, etc.) would be provided the minimum protection required by law. This alternative would generally provide the opportunity for the maximum allowable levels for resource *use*, exploration, development and production. If selected, this alternative plus the guidance given in the Management Common To All Alternatives section would form the RMP.

Land Tenure Adjustment

The BLM would attain an economical and manageable public land base. Isolated, uneconomical, or marginally important resource lands would be available for disposal. Acquisition of private and state lands would be pursued to consolidate public lands into large blocks. *A total of 15,689 acres of public land would be identified for disposal with an emphasis on exchange. These lands meet FLPMA Section 203(a)(1) sale criteria and are listed in Appendix 1.2, List 1. An additional 34,428 acres of public land would be identified for disposal and are listed in Appendix 1.2, List 2. These lands have not been field inventoried, however, this alternative assumes that after a field inventory occurs, the lands would meet FLPMA Section 203(a)(1) sale criteria.* Federal subsurface could be exchanged or sold for fair market value.

The State Director's Guidance on Land Pattern Review and Land Adjustment (USDI-BLM 1984) is being revised by this alternative for the planning *area* only. The criteria presented in the State Director's Guidance has been applied to the lands in the RAs *and* the criteria applicable to each resource area can be found in Appendix 1.1. As a result of evaluating the lands in the planning area against the criteria, the map presented in the State Director's Guidance no longer applies to the planning area; it is replaced by Map 3 of this document.

Implementation

The preferred method of disposal would be through exchange. The management objective for disposing of the exchange lands identified in Appendix 1.2 would be to allow the acquisition of areas in the Sweet Grass Hills, Kevin Rim, Marias River *Corridor*, Missouri River *Corridor*, Cow Creek *area*, the Rocky Mountain Front, and important wildlife habitat areas. The order of these areas has no bearing on priority of acquisition.

Off-Road Vehicle Management

The BLM would maximize opportunities to use off-road vehicles within the planning area. Travel in wilderness study areas (32,000 acres) would be limited to existing roads, trails *and vehicular ways. However*, the BLM *could* issue permits for cross country travel for administrative vehicular use in these restricted areas. The remainder of the planning area (594,098 acres) would be open to off-road travel. The BLM would *identify* about 640 acres of this open designation area for intensive off-road vehicle use.

Implementation

The BLM would prepare an ORV implementation plan *containing* detailed information on open and limited areas, the intensive use area, and on signing and monitoring of ORV use.

Travel would be limited to existing roads, *trails* and vehicular ways in WSAs *which would be identified on maps available to the public. Areas designated as limited* and the intensive use area, would be signed with an explanation of allowed uses.

Wilderness study areas designated wilderness by Congress would be closed to all vehicular traffic at the time of designation, *except for administrative access as defined in the Wilderness Act.* A portion of the Cow Creek WSA is currently recommended as preliminarily suitable for designation. *ORV use on WSAs not designated wilderness, or on acquired lands, would be consistent with adjacent lands.*

Any intensive ORV use area must meet the following criteria prior to designation—

(1) the area would be at least 5 miles from an emphasis area;

(2) the area *should not* be located in a Class *I or II* VRM area, *especially in areas receiving high recreational use*;

(3) the area would be located on public land with a buffer of public land to reduce conflicts with private landowners;

(4) the area would have good public access or the capability for such access;

(5) areas with open mine shafts and other hazards would not be considered for ORV use;

(6) the area should avoid reservoirs, watersheds *of important reservoirs*, floodplains, stream channels, wetlands and riparian zones;

(7) the area would contain suitable topography and soil conditions to maximize ORV user's enjoyment and reduce health and safety risks (i.e., steep, but not too steep, few surface rocks, non-flooding areas);

(8) area would be located 1/4-mile from raptor nest sites 1½-miles from known grouse leks; 1/2-mile from known bald eagle nests and 1-mile from known peregrine falcon nests;

(9) *use of crucial wildlife ranges would not be allowed May 1-June 30*;

The BLM would acquire access, *as needed, into* intensive use areas through exchange, easement or purchase.

The BLM would monitor and enforce all designations once ORV implementation plans are completed.

Right-of-Way Location

Nationally designated special management areas (i.e., the UMNWSR) would be considered transmission facility avoidance areas. However, the remainder of the planning area would remain open to such facilities.

The *entire* planning area would remain open to communication site location.

Implementation

Lineal rights-of-way would be permitted in the Upper Missouri National Wild and Scenic River Corridor at the following locations: mile 0-1, mile *20-21*, mile 38.5-39.5, mile 88-89, mile 101-103, mile 131.5-132.5 and mile 148.5-149.5 *(see Map 4 in the back of this document).* The remainder of the corridor would be an avoidance area.

ROWs proposed through WSAs would have to meet the non-impairment criteria. WSAs designated wilderness by Congress, would become exclusion areas for *lineal* ROW location. If other areas are designated by Congress, they would become ROW exclusion areas; if possible, corridors would be designated through them.

BLM would evaluate each ROW request through an environmental assessment and develop the mitigation required by law to protect various resources (i.e., threatened and endangered species, cultural artifacts).

Emphasis Areas

Current management practices and allocations would continue in the Kevin Rim, Sweet Grass Hills and Cow Creek areas. All three areas would be managed for the multiple use of all resources with no additional stipulations.

The BLM has reviewed the East Butte, Bureau of Reclamation withdrawal (569.67 acres) and recommended that 40 acres of the withdrawal be retained and the remaining 529.67 acres returned to BLM administration. The withdrawal was originally granted as a riprap source for reclamation projects. The 40 acres still needed by BR are adjacent to the existing quarry and provide riprap reserves that may be needed in the future. The area revoked from the withdrawal would be opened to mineral entry and would be managed under the management guidance for the area.

Implementation

Please refer to the implementation section for Kevin Rim, Sweet Grass Hills, and Cow Creek in Alternative A.

Upper Missouri National Wild and Scenic River Management

The BLM would maximize the full range of land and water based recreation opportunities in all segments of the river corridor, consistent with the *Wild and Scenic Rivers Act* (PL 90-542, 1968) and the amendment for the Upper Missouri (PL 94-486, 1976). Visitor center contact services would be provided consistent with the MOU with National Park Service *or future legislation.* This may be accomplished through the use of private sector initiatives to provide a full range of visitor services.

Visitor Services *Implementation*

The BLM would not set floater capacity limits *nor would* outfitters be limited on either the number of people or boats.

The visitor contact station at Fort Benton and the ranger stations at Coal Banks and Judith Landing would be operated for a 6-month season *as necessary and as funding levels permit. The season would begin* the weekend before Memorial Day *and end Thanksgiving weekend. The* visitor contact station would provide visitors with the necessary permits and safety information for their float. In addition, the center would provide information on the natural and cultural history of the river. The ranger stations would provide visitor permits and information and serve as public health and safety contact sites.

Interpretive trails and sites would be developed at *appropriate* geological, historical, archaeological, paleontological and natural area sites. These developments may include interpretive signs or displays. *Appropriate* sites currently identified include the Stafford Ferry, Cow Creek, Evans Bend, Steamboat Point, Little Sandy, and Hole-In-The-Wall. Other sites may be developed if there is substantial public use, the BLM acquires important new lands, or major new resource discoveries are made.

Islands would be *available for recreational uses.*

Facility Management *Implementation*

The BLM would clear brush (1/4-acre) for pathways and tenting areas *at* all undeveloped sites. All such areas would be signed in the recreational and scenic sections of the river. All sites including those in the wild portions would be shown on the river maps. These sites would be upgraded to semi-developed sites thorough the life of the plan (10-15 years).

Semi-developed sites would be maintained *and* additional sites may be developed in all sections of the river based on the following criteria—

(1) increasing use of the river or of undeveloped campsites;

(2) impacts to soil and vegetation becoming long term; i.e., heavy use begins to compact soils and kill vegetation as determined by monitoring;

(3) sanitation becomes a health problem;

(4) additional sites are needed to rest existing campsites; and/or

(5) better distribution of campsites is needed.

Development at these sites would be constrained by the *Wild and Scenic Rivers Act, as amended.* If access is required for capital improvements, the following restrictions would apply: in wild sections of the UMNWSR, roads not needed for administrative purposes would be closed, contoured to a natural appearance and seeded with a native species; in scenic sections, use would be limited to administrative purposes; *and* standard stipulations (see Appendix 2.6) would be applied to developments in the recreational segments.

Developed sites would be established and managed based on demand and economic feasibility. These developments would be allowed in the recreational and scenic sections of the river corridor and would be subject to restrictions in the *Wild and Scenic Rivers Act, as amended.* These developments may include boat *liveries*, lodging facilities, interpretive services, eating facilities, etc.

The BLM would not acquire or manage existing state camping facilities (six sites).

Private Sector Initiatives Implementation

The BLM would encourage private sector initiatives to help *maximize recreational use* on the river. These ventures would range from operating *and maintaining sites* to full scale developments offering boat rentals, lodging and eating facilities.

Private sector initiatives would be managed within the constraints of the Wild and Scenic Rivers Act, *as amended*, and under the guidance in this RMP. Failure to comply would cause *revocation of* the operators permit.

The recreational segment definition in the Wild and Scenic Rivers Act allows for the most development potential. If there is a need established for some type of facility, whether it be BLM or private sector initiative, the merits and economic feasibility would be assessed under the guidance provided in the applicable wild and scenic river legislation, this RMP, and the Coordinated River Activity Plan.

Health and Safety *Implementation*

Law enforcement would be contracted to the local sheriff's department.

Search and rescue operations would be coordinated and provided by local authorities.

ALTERNATIVE C

The management guidance in this alternative emphasizes the protection of natural and cultural resources. Other public land uses would be constrained by stipulations and/or mitigation developed to provide protection and enhancement of non-consumptive resources (recreation, soil, water and air), the natural resources (wildlife, vegetation, etc.) and cultural resources. If selected, this alternative plus the guidance given in the Management Common To All Alternatives section would form the RMP.

Land Tenure Adjustment

The BLM would emphasize the retention of public lands. *A total of 15,689 acres of public land would be identified for disposal with an emphasis on exchange. These lands meet FLPMA Section 203(a)(1) sale criteria and are listed in Appendix 1.2, List 1. The remainder of the lands in the planning area would be retained. The lands listed in Appendix 1.2, List 2, have not been field inventoried and it is assumed they do not meet FLPMA Section 203(a)(1) sale criteria and would be retained.*

The State Director's Guidance on Land Pattern Review and Land Adjustment (USDI-BLM 1984) is being revised by this alternative for the planning *area* only. The criteria presented in the State Director's Guidance has been refined and applied to the lands in the *resource areas (see Appendix 1.1).* As a result of evaluating the lands in the planning area against the criteria, the map presented in the State Director's Guidance no longer applies to the planning area; it is replaced by Map 3 in the back of this document.

Implementation

The preferred method of disposal would be through state and private exchanges. The management objective for disposing of the exchange lands would be to acquire lands in specially managed areas (i.e., UMNWSR, WSA, ACECs, national historic trails areas, etc.) and in high value resource areas (i.e., crucial big game wintering and calving/fawning areas, threatened or endangered species habitat, important cultural sites, etc.). Current areas of interest are (no priority) along the Missouri and Marias Rivers, along Cow Creek, north Blaine County and the Sweet Grass Hills. All acquisitions would meet the criteria listed in Appendix 1.1.

Off-Road Vehicle Management

The BLM would provide maximum protection to the physical and biological environment to *reduce, to the fullest extent possible,* the negative impacts from off-road vehicles.

ORV use in the following areas would be limited to designated roads and trails: WSAs, the UMNWSR Corridor, the Cow Creek ACEC, the Kevin Rim ACEC, the Sweet Grass Hills ACEC, areas of sedimentary breaks type soils and riparian areas (a total of *329,794* acres). *Restrictions developed for these areas would be applied yearlong. In addition* there would be no travel on roads and trails in sedimentary breaks type soils when they are wet. Seasonal restrictions requiring vehicles to use existing roads and trails would be placed on important wildlife habitat areas (99,000 acres). *A total of 428,794 acres would be limited yearlong or seasonally to ORV use. The Gist Road between the cabins and the Missouri River (5 acres)* would be closed to vehicular use. The remainder of the planning area (197,299 acres) would remain open to ORV use.

Implementation

The BLM would conduct an intensive road and trail inventory in the areas mentioned above. An ORV implementation plan would be written to identify designated roads and trails and plan the closure of unnecessary roads in limited areas. In areas limited to existing roads and trails (including seasonally restricted areas) the implementation plan would identify *those* roads and trails. All implementation plans would contain details for signing and monitoring designated areas. *Maps of the designated areas would be published.* Table 2.3 identifies seasonal restrictions which would apply to important wildlife areas.

TABLE 2.3
SEASONAL ORV RESTRICTIONS[1]

Deer/elk winter range	December 1 - March 15
Deer/elk fawning and calving areas	May 1 - June 30
Antelope winter range	December 1 - February 28
Raptor nesting areas	February 1 - August 15
Grouse nesting areas	April 1 - June 30

[1]BLM, 1987

Wilderness study areas designated wilderness by Congress would be closed to all vehicular traffic at the time of designation, *except for administrative access, as defined in the Wilderness Act.* A portion of the Cow Creek WSA is currently recommended as preliminarily suitable for designation. *ORV use in areas dropped from consideration as wilderness, or on acquired lands, would be consistent with adjacent lands.*

Permits *could* be issued for vehicular use in limited and closed areas for administrative purposes *on a case-by-case basis.*

The BLM would publish maps of the restricted areas *and* erect signs *explaining* the restrictions. The BLM would monitor and enforce all designations *once implementation plans are completed.*

Right-of-Way Location

The BLM would protect important natural and cultural resources and special management areas by designating those areas as avoidance or exclusion areas for the location of *lineal* rights-of-way. *The Kevin Rim and the UMNWSR would be exclusion areas. WSAs, ACECs, areas of sedimentary breaks soil and riparian areas would be designated avoidance areas.*

New requests for communication site location would be encouraged to locate with existing facilities. The BLM would not permit communication sites on the *Middle* and West *Buttes* of the Sweet Grass Hills.

Implementation

Table 2.4 identifies the areas within the UMNWSR corridor where BLM would allow ROW location.

TABLE 2.4

RIGHT-OF-WAY WINDOWS IN THE UPPER MISSOURI NATIONAL WILD AND SCENIC RIVER CORRIDOR[1]

River Mile 0	to River Mile 1
River Mile 20	to River Mile 21
River Mile 38.5	to River Mile 39.5
River Mile 88	to River Mile 89
River Mile 101	to River Mile 103
River Mile 131.5	to River Mile 132.5
River Mile 148.5	to River Mile 149.5

[1]BLM, 1987

[2] River miles are identified on map 4 in the back of this document. River mile 0 is located at Ft. Benton. River mile 149.5 is marked by the Fred Robinson Bridge.

No new ROWs would be issued off the east side of Kevin Rim. Once industry relinquishes existing ROWs off the east side, new facilities would not be authorized in their place. The BLM would avoid location of ROWs in all WSAs; the Cow Creek ACEC; the Sweet Grass Hills ACEC; riparian areas; and sedimentary breaks type soils, unless the disturbed area would be restored to its predisturbance condition within 2 years. These areas coincide closely with the restricted ORV use areas shown on Map 4 in the back of this document.

Any area designated wilderness by Congress would be a ROW exclusion area. Areas *dropped from consideration as wilderness* would be open to ROW location, unless they fall into the avoidance category because of soils, riparian areas or *other resource considerations.*

Every ROW grant request would be subject to environmental review and stipulations and mitigation measures would be developed to ensure rehabilitation of the area.

Emphasis Areas

The BLM would provide maximum protection of the significant resources in the Kevin Rim, Sweet Grass Hills, and Cow Creek areas (see Figures 2.2, 2.3, 2.4).

The Kevin Rim would be designated *an ACEC* to provide protection, maintenance and/or enhancement to the peregrine falcon habitat, other sensitive raptor habitat, and cultural resources while providing for continued oil and gas development.

The East, *Middle* and West *Buttes, of the* Sweet Grass Hills, would be designated *an ACEC* to protect and maintain the area for Native American religious and cultural practices, public recreation and wildlife habitat. A protective mineral withdrawal would be pursued for this ACEC.

The Cow Creek area would be designated *an ACEC* to protect, maintain and/or enhance the Nez Perce *National Historic* Trail, Cow Island Trail, and other resources in the *area.*

Kevin Rim Implementation

The BLM would use the following guidance to prepare an activity plan detailing specific management of the area. *The Rocky Mountain Front (RMF) Raptor Guidelines (Appendix 2.2) would be used to develop site-specific mitigation for activities in occupied raptor habitat. These guidelines would be used to implement a special stipulation to be applied to new leases in occupied raptor habitat (see Appendix 2.2). However, the raptor guidelines would only be applied, as necessary, on a site-specific basis at the time an APD is submitted and restrictions may be waived by the authorized officer at the production phase.*

The BLM would work with operators to apply necessary guidelines to any new activity *on existing leases* which threatens to disrupt the nesting and rearing cycles of sensitive *or T&E* raptor species using *Kevin* Rim. These guidelines would be *used to implement a special* stipulation *on* all new oil and gas leases in the *raptor habitat* area *(see Appendix 2.2).*

The BLM would inventory the Kevin Rim area for cultural resources. Based on this survey and/or additional surveys the BLM would not authorize projects within 1/4-mile *of the base of the Kevin Rim* escarpment unless impacts to the cultural resources could be mitigated.

BLM would encourage ROW *location* off the west side of Kevin Rim. The BLM would *not* authorize new ROWs off the escarpment (east side). *If existing east side facilities are relinquished by industry, new facilities on the east side would not be authorized in their place.*

Figure 2.2 Kevin Rim Emphasis Area — Surface Ownership Map.

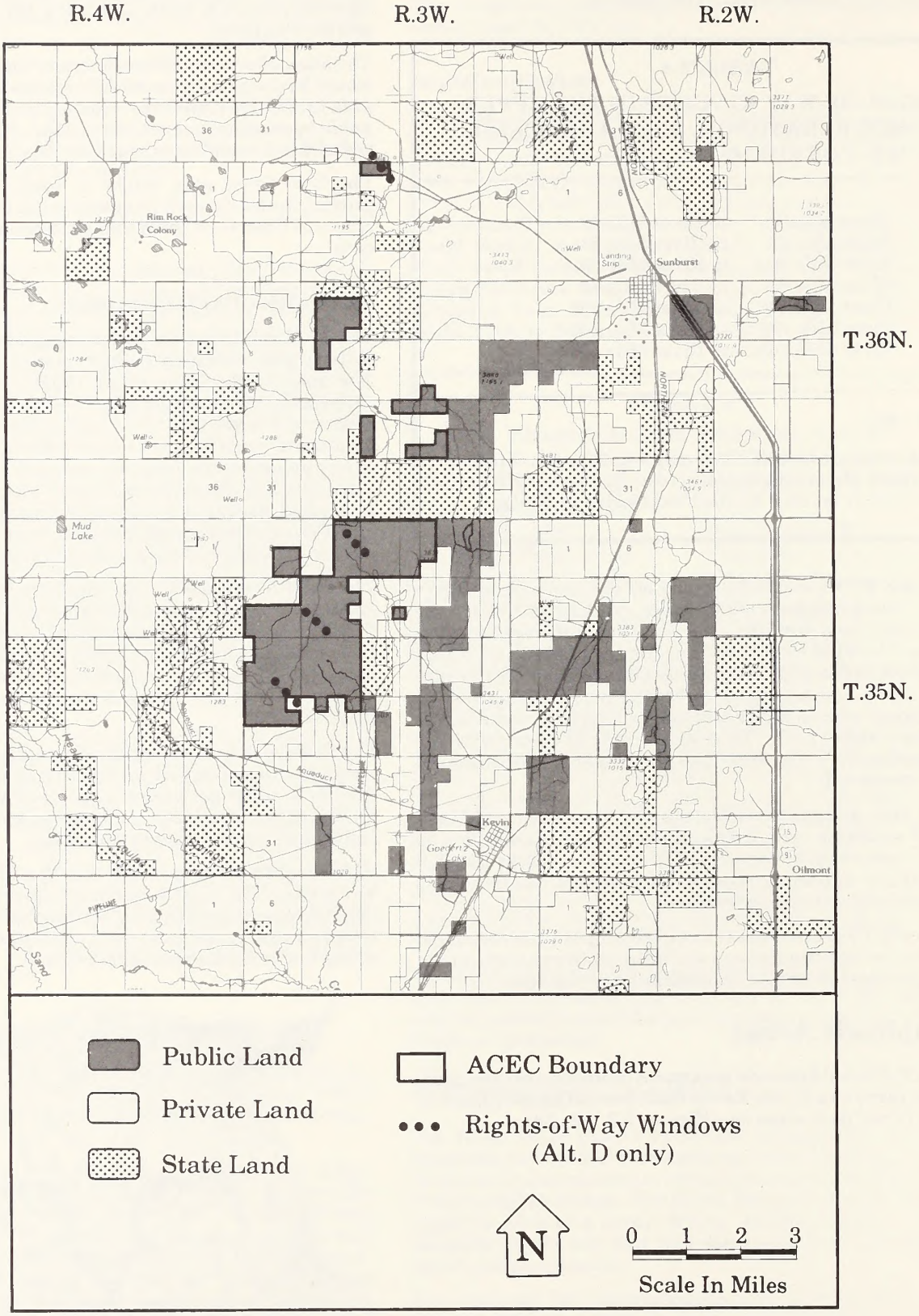


Figure 2.3 Sweet Grass Hills Emphasis Area — Surface Ownership Map.

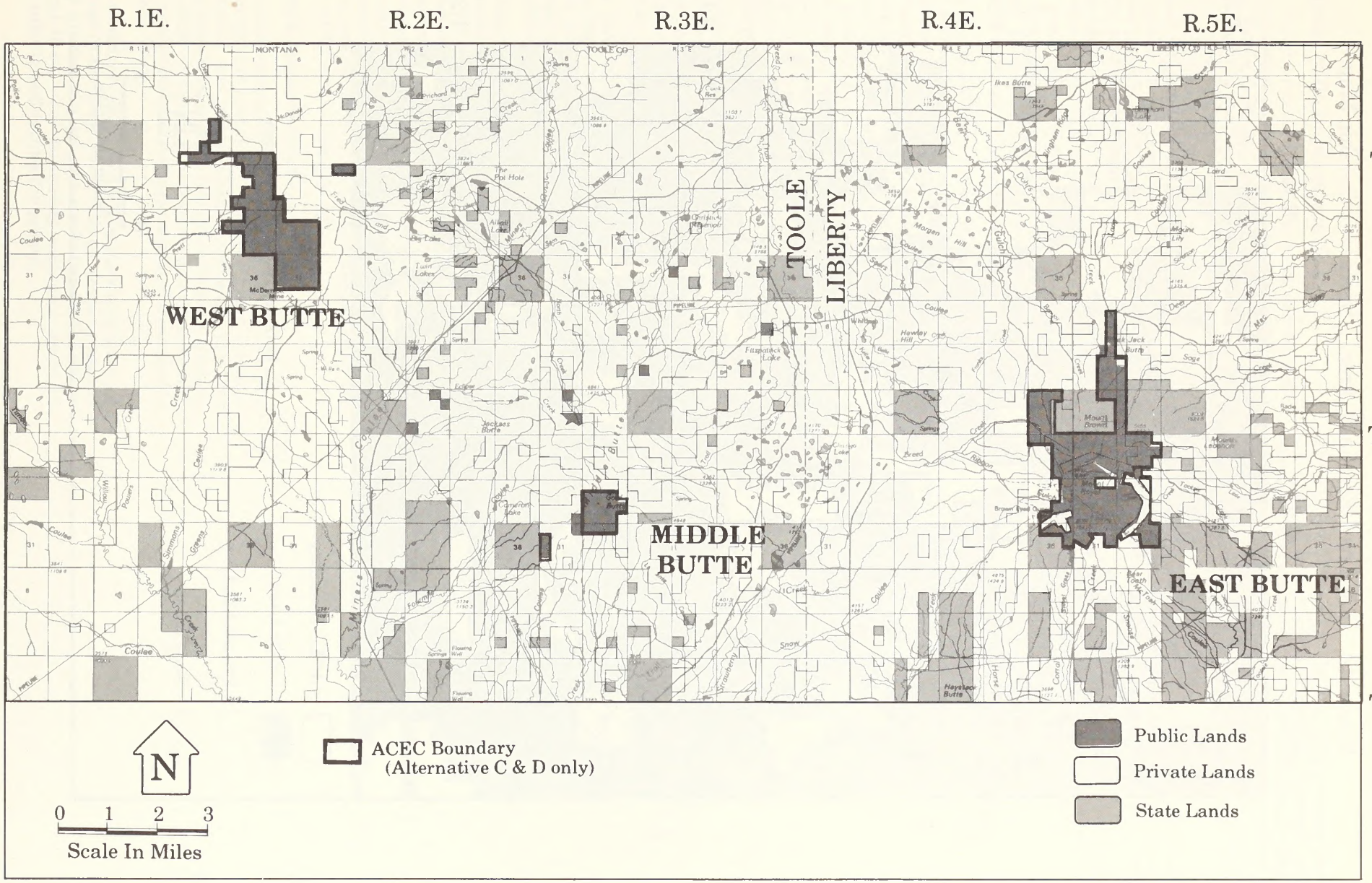
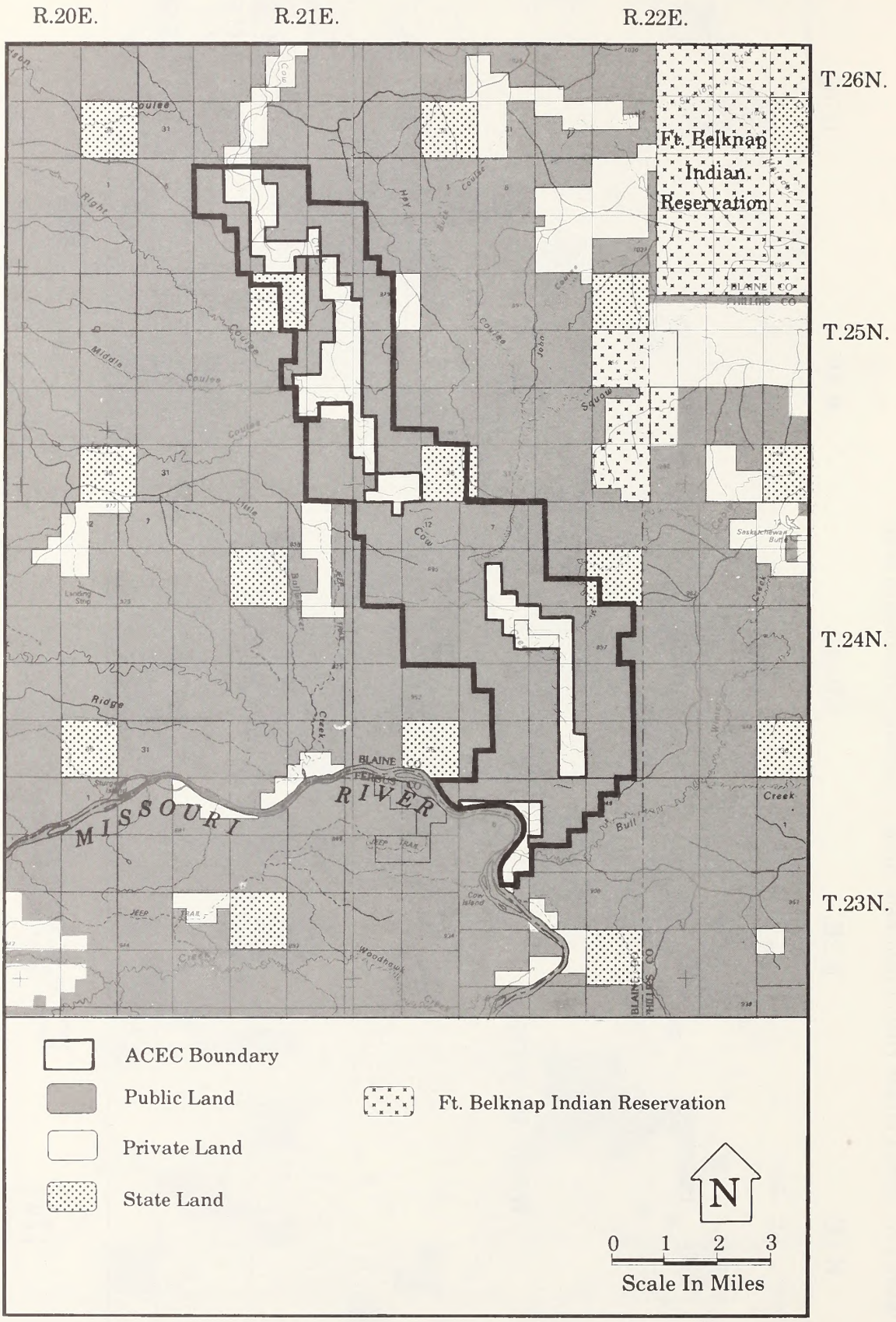


Figure 2.4 Cow Creek Emphasis Area — Surface Ownership Map.



Sweet Grass Hills Implementation

The BLM would prepare an activity plan detailing the specific management of the area *and* to preserve the local values for Native American religious uses, wildlife and recreation. The BLM would pursue a protective withdrawal for the ACEC. This protective withdrawal would segregate the ACEC from all mineral entry. *Locatable mineral development could continue on valid claims existing at the time of the protective withdrawal. Validity exams would be conducted on preexisting claims when in the public's best interest. The validity exam constitutes due process. A mining claimant has not established a property right if a validity exam reveals the claim is not supported by a mineral discovery under the mining laws.* The *withdrawal* would eliminate future mining claim location. The BLM would consult with Native American tribes prior to authorizing developments in the *ACEC area.*

The Rocky Mountain Front Raptor Guidelines (Appendix 2.2) would be used to develop site-specific mitigation for activities in occupied raptor habitat. The BLM would work with operators to apply the raptor guidelines, as necessary, to new activities on existing leases to protect sensitive, threatened or endangered raptor species. These guidelines would be used to implement a special stipulation to be applied to new leases in occupied raptor habitat (see Appendix 2.2). The raptor guidelines would be applied on a site-specific basis to protect an active nest at the time an APD is submitted and may be waived by the authorized officer at the production phase.

These guidelines would also be used to mitigate impacts caused by development on valid existing claims in the ACEC when project specific analysis determines they are needed to prevent unnecessary and undue degradation of federal lands.

Allotment management plans in the ACEC would be revised to emphasize the maintenance and/or improvement of elk habitats. This may be accomplished through season-of-use modification, pasture modification, or temporary exclosures, etc.

The BLM has reviewed the East Butte, Bureau of Reclamation (BR) withdrawal (569.67 acres) and recommended that 40 acres of the withdrawal be retained and the remaining 529.67 acres returned to BLM administration. The withdrawal was originally granted as a riprap source for reclamation projects. The 40 acres still needed by BR are adjacent to the existing quarry and provide riprap reserves that may be needed in the future. This acreage would not be reopened to mineral entry; it would be managed under the protective withdrawal for this ACEC.

Cow Creek Implementation

The BLM would prepare an activity plan for the area. The plan would provide guidance to preserve scenic, interpretive, recreation and paleontological values in the Cow Creek area associated with the Nez Perce National Historic Trail. The BLM would coordinate this plan with the USFS since that agency has the lead responsibility for *managing* the Nez Perce Trail.

The BLM would reevaluate and adjust the visual management ratings in the area. These ratings would be used to determine whether any projects would impact the scenic quality and if so, what mitigating measures would be necessary prior to authorizing the project.

The BLM would manage the area with a strong emphasis on riparian management. Existing allotment management plans would be revised to incorporate grazing management practices to improve riparian community conditions. Special emphasis would be given to measures to discourage or prevent livestock congregation along the bottoms.

The BLM would protect paleontological sites within the ACEC from surface disturbance by other management activities while still allowing scientific use of this resource.

Any future ROW grant would be based on valid, existing rights within the area. All such developments would be subject to strict visual and reclamation stipulations.

Upper Missouri National Wild and Scenic River Management

BLM recreation management would emphasize the maximum preservation of the natural environment and cultural values of the UMNWSR Corridor. This management may be accomplished through public and private sector initiatives.

Visitor Services *Implementation*

The BLM would redetermine user capacity based on the Limits of Acceptable Change (see Appendix *2.10*). This process would, with public input, identify how much environmental change *in use areas* would be acceptable. Management would keep the character and rate of change due to human factors within acceptable levels, emphasizing the protection of the natural and cultural environment. Parameters considered during the review process would include but would not be limited to, vegetation change; the amount of bare ground near a campsite; bankside trails; sanitation problems; litter; and available firewood.

The Fort Benton Visitor Contact Station would be maintained and operated to provide visitors with permits and information on the river. The center would also provide interpretive information on the cultural and natural history of the area under the provisions of the MOU with the National Park Service *or future legislation*. The ranger stations at Coal Banks and Judith Landing would provide permits and health and safety information to river users. All of these visitor service centers would be operated from the weekend before Memorial Day through Thanksgiving weekend, *as necessary and as funding levels permit.*

Interpretive activities in the corridor would be in conjunction with the current Floater's Guide. No physical improvements or facilities would be provided for interpretation except at *major* launch/take out points on the river.

Information or interpretive signs, except hazard warnings visible from the river, would be prohibited on all federal lands.

Islands would be closed to all uses. The islands would be set aside for wildlife habitat.

Facility Management *Implementation*

The BLM would continue to maintain the undeveloped sites by clearing brush, a maximum of 1/4-acre, for campsite location and removing trash left at these areas.

The existing semi-developed sites would be maintained, unless use is impacting natural and cultural resources. If impacts cannot be mitigated the BLM would close those sites. Additional site development would occur only if impacts can be mitigated, old areas can be reclaimed and no crucial habitat or cultural resources are impacted. New capital improvements would only be allowed along major roads within the recreational sections and when a clear public need is identified.

Developed sites would be restricted to the existing launch/take out sites in the recreational and scenic sections of the corridor. Development would be dependent on demonstrated need, economic feasibility and whether impacts can be mitigated.

The BLM would acquire the Montana Department of Fish, Wildlife and Parks campsites. These areas would be managed under the constraints listed above.

Private Sector Initiative Implementation

The BLM would not allow the development of major concession complexes on public land. The BLM would allow private sector initiatives in campground maintenance and development under the constraints discussed above *under* Facility Management. The BLM would permit outfitters, guides and boat rental within/upon the river. *Private sector initiatives would be managed within the constraints of the Wild and Scenic Rivers Act, as amended and under the guidance of this RMP. Failure to comply would cause a revocation of the operator's permit.*

Health and Safety *Implementation*

The BLM would continue and may expand visitor services which provide for public health and safety. BLM would assume responsibility for law enforcement. The BLM would continue cooperative efforts for search and rescue.

ALTERNATIVE D (The Preferred Alternative)

This alternative is a balance of the preceding alternatives. It balances the demands of resource development and the protection of sensitive areas and important resources. If selected, this alternative plus the guidance given in the Management Common To All Alternatives section would form the RMP.

Land Tenure Adjustment

The BLM would achieve a public land base which consolidates public holdings in areas containing high value resources. *A total of 15,689 acres of public land would be identified for disposal, with an emphasis on exchange. These lands meet FLPMA Section 203(a)(1) sale criteria and are shown in Appendix 1.2, List 1. An additional 34,428 acres of public land has not been field inventoried, but would be available for disposal by exchange if in the public's interest and a field inventory indicates a parcel meets FLPMA Section 203(a)(1) criteria, disposal of the parcel could be by sale. These lands are shown in Appendix 1.2, List 2.*

The State Director's Guidance on Land Pattern Review and Land Adjustment (USDI-BLM 1984) *was* revised by this alternative for the planning *area*. The criteria presented in the State Director's Guidance has been applied to the lands in the RAs. The criteria applicable to each resource area can be found in Appendix 1.1. As a result of evaluating the lands in the planning area against the criteria, the map presented in the State Director's Guidance no longer applies to the planning area; it is replaced *by Map 3* in the back of this document.

Implementation

The preferred method of disposal would be through exchange.

The management objective for disposing of the exchange lands identified in Appendix 1.2 would be to concentrate acquisition in (no priority intended): the Missouri and Marias River areas; *the* Cow Creek, Sweet Grass Hills and Kevin Rim ACECs *and surrounding areas with similar values;* the north Blaine *County* antelope winter range; and important wildlife habitat (including areas outside the planning area such as the Rocky Mountain Front). All acquisitions would depend on a willing seller, *unless the public interest determination indicates the use of eminent domain authority is appropriate.*

Off-Road Vehicle Management

The BLM would provide for the public use of off-road vehicles while protecting the resource values and providing for public safety. The BLM would limit off-road vehicle use to designated roads and trails in the UMNWSR Corridor, *the Sweet Grass Hills, Cow Creek and Kevin Rim ACECs and in important riparian areas.* Travel in WSAs would be limited to existing roads and vehicular ways. *Yearlong ORV limitations would apply to 130,070 acres.* The BLM would limit off-road vehicles seasonally in the following areas: elk and deer crucial winter areas and calving/fawning areas; antelope crucial winter range; raptor nesting areas, grouse nesting areas and sedimentary breaks type soils (298,039 acres). *Following the development of activity plans for the Sweet Grass Hills and Kevin Rim ACECs, ORV restrictions may be applied by type of vehicle also.* Travel *in areas of sedimentary soils* would be restricted to existing roads and trails during the wet period (April 1—November 1). These areas can be seen on Map 4 in the back of this document. The Gist Road between the cabins and the Missouri River (5 acres) would be closed to vehicular use.

The BLM may issue permits on a case-by-case basis for administrative vehicular use in these areas. *The remainder of the planning area (197,984 acres) would remain open to ORV use.*

Implementation

The BLM would conduct an intensive road and trail inventory in the areas mentioned above. An ORV implementation plan would be written *and would identify specific restrictions to be applied in limited areas.* All implementation plans would contain details for signing and monitoring designated areas. Table 2.3 identifies seasonal restrictions which would apply to important wildlife areas. *Implementation of restrictions outlined under the limited designations in this document would not be put into effect until ORV or other activity plans are completed. Current ORV restrictions in the UMNWSR Corridor, Missouri Breaks, and WSAs would continue until these activity plans are implemented.*

The BLM would publish maps showing designated areas and the applicable restrictions. An area for intensive ORV use would be designated if the need arises based on the following criteria—

(1) the area would be at least 5 miles from an emphasis area;

(2) the area *should not* be located in a Class *I or II* VRM area *particularly in areas receiving high non-motorized recreational use.*

(3) the area would be located on public land with a buffer of public land to reduce conflicts with private landowners;

(4) the area would have good public access or the capability for such access;

(5) the area would be located where mineral discovery and development are not likely;

(6) the area would avoid reservoirs, watersheds of important reservoirs, floodplains, stream channels, wetlands and riparian zones;

(7) the area would contain suitable topography and soil conditions to maximize ORV users enjoyment and reduce health and safety risks (i.e., steep, but not too steep, few surface rocks, non-flooding areas);

(8) these areas would be located 1/4-mile from raptor nest sites 1½-miles from known grouse leks; 1/2-mile from known bald eagle nests and 1 mile away from known peregrine falcon nests.

(9) use of *crucial wildlife ranges would not be allowed* May 1—June 30.

Areas designated wilderness by Congress would be closed to all vehicular traffic at the time of designation. A portion of the Cow Creek WSA is currently recommended as preliminarily suitable for designation. WSAs which are not designated would be managed under adjoining ORV constraints, if any *apply.*

Written authorization could be *granted* for vehicular use in limited and closed areas for administrative purposes.

The BLM would acquire access to intensive use areas through exchange, easement or purchase.

Right-of-Way Location

The BLM would permit rights-of-way, provided the impacts can be mitigated. Areas under specific management prescriptions (ACECs, WSAs, etc.) or having important, sensitive resources would be avoidance areas. Nationally designated areas for natural or cultural resources (wilderness areas, etc.) would be exclusion areas.

Communication sites would *not be permitted on* the West *and Middle Buttes* of the Sweet Grass Hills.

Implementation

The Wild sections of the UMNWSR would be exclusion areas for ROW siting.

The scenic and recreational sections of the UMNWSR would be avoidance areas. Table 2.4 lists the windows for ROW siting through these sections. New facilities would only be permitted in these segments if the natural, physical and cultural qualities of the corridor could be maintained.

The Kevin Rim ACEC would be an avoidance area for *lineal* ROWs. *Following a raptor inventory, and development of an activity plan, the Bureau would determine where ROW facilities (both transmission and distribution) could be located off the east side of Kevin Rim. The ACEC activity plan would determine if any windows off the east rim should be designated, and if so, how many and where. Windows would not necessarily be established along existing facilities.*

Cow Creek and the Sweet Grass Hills ACECs, WSAs, riparian and wetland areas which meet the definition of wetland *(see Glossary)* and areas of sedimentary breaks soils would be avoidance areas. Future ROW siting would only be permitted if impacts in these areas could be *adequately* mitigated.

Communication site location would be encouraged at existing sites but may be permitted elsewhere in the planning area *(except on the West and Middle Buttes of the Sweet Grass Hills)* provided impacts are mitigated.

Emphasis Areas

The BLM would provide protection of the significant resources in the Kevin Rim, Sweet Grass Hills, and Cow Creek areas (see Figures 2.2, 2.3, 2.4). The *federal surface in these* three areas would be designated ACECs and managed *for* the following *resource values.*

The Kevin Rim would be designated and managed to protect, maintain and/or enhance the peregrine falcon habitat, other sensitive raptor habitat, *and* cultural resources *while encouraging other types of multiple use activities to the extent they are compatible with the ACEC designation.*

The main goal of the Sweet Grass Hills ACEC, which is comprised of the East, Middle and West Buttes, would be to protect habitat which has high potential for reintroduction of the endangered peregrine falcon; protect areas of traditional religious importance to Native American tribes; and protect seasonally important elk and deer habitat. Other types of multiple use activities such as hunting, livestock grazing and mineral development would be conditioned to be compatible with the ACEC designation.

The Cow Creek area would be designated to protect, maintain and/or enhance the Nez Perce *National Historic* Trail, Cow Island Trail, and other *associated* resources.

Kevin Rim Implementation

This guidance would be followed until an activity plan is completed which would use this guidance to identify specific management actions. The Rocky Mountain Front Raptor Guidelines (Appendix 2.2) would be used to develop site-specific mitigation for activities in occupied raptor habitat. The BLM would work with operators to apply necessary guidelines to any new activity *on existing leases* which threatens to disrupt the nesting and rearing cycles of *T&E or* sensitive raptor species using the rim. These guidelines *(see Appendix 2.2)* would be *used to implement a special* stipulation to all new oil and gas leases in the *raptor habitat* area; *if warranted by resource information, and may be waived by the authorized officer.*

The BLM would inventory the Kevin Rim area for cultural resources. Based upon this survey and/or additional surveys the BLM would not authorize projects within 1/4-mile *below the base of the Kevin Rim* escarpment unless impacts to the cultural resources could be mitigated.

BLM would encourage ROW *location* off the west, *rather than the east,* side of Kevin Rim. *Following a raptor inventory, the Bureau would determine where ROW facilities (both transmission and distribution) could be located off the east side of the rim. The ACEC activity plan would determine if any windows off the east rim should be designated, and if so, how many and where. Windows, if established, would not necessarily be established along existing facilities.*

Sweet Grass Hills Implementation

This guidance would be followed until an activity plan is completed using this guidance to identify specific management actions.

1. Native American tribes who utilize the area would be consulted prior to surface disturbing activities which require BLM authorization (excluding casual use). This consultation would provide guidance in applying restrictions or mitigating measures where there may be impacts to traditional cultural values.

2. The Rocky Mountain Front Raptor Guidelines (see Appendix 2.2) would be used to develop site-specific mitigation for activities in occupied raptor habitat. The BLM would work with operators to apply necessary guidelines to any new activity on existing leases which threatens to disrupt the nesting and rearing cycles of T&E or sensitive raptor species using the area. These guidelines would be used to implement a special stipulation to all new oil and gas leases in the raptor habitat area; if warranted by resource information and may be waived by the authorized officer.

3. No communication sites would be permitted on the West or Middle Buttes.

4. Motorized vehicles would be limited to designated roads and trails in the ACEC. The activity plan would further define limitations regarding time of year and type of vehicle.

5. The Bureau would continue to monitor the ACEC's wildlife habitat values to ensure that management goals and objectives are met. Livestock allotment management plans in the ACEC would emphasize the maintenance and/or improvement of important wildlife winter habitat. This may be accomplished through season-of-use modification, pasture modification, temporary exclosures, etc.

6. The BLM has reviewed the East Butte, Bureau of Reclamation (BR) withdrawal (569.67 acres) and recommended that 40 acres of the withdrawal be retained and the remaining 529.67 acres returned to BLM administration. The withdrawal was originally granted as a riprap source for reclamation projects. The 40 acres still needed by BR are adjacent to the existing quarry and provide riprap reserves that may be needed in the future. The area revoked from the withdrawal would be opened to mineral entry and would be managed under the management guidance for the area.

7. To ensure the orderly development of the mineral resources while protecting the ACEC values, the following management guidelines would apply:

A. The ACEC would remain open to mineral entry.

B. An approved Plan of Operations would be required for all activities (43 CFR 3809.1-4(b)), exceeding casual use (as defined in 43 CFR 3809.1-2). "Operations" includes all activity associated with exploration, assessment work, development and processing of mineral deposits located under the mining laws.

C. In order to ensure adequate rehabilitation, bonding would be required on all operations, except for casual use (43 CFR 3809.1-9).

D. The following reclamation guidance would be applied to Plans of Operation. This guidance has been developed from 43 CFR 3809.1-3; and 43 CFR 3809.1-5 to prevent unnecessary and undue degradation to ACEC values:

— Rehabilitation measures would take into consideration the replacement of disturbed elk and mule deer habitat components.

— In order to accommodate mining operations while protecting important wildlife habitat, timing restrictions may be applied on a case-by-case basis to prevent undue and unnecessary degradation.

— Mining operations located in crucial wildlife habitat may be required to rehabilitate their previous disturbances prior to initiating new surface disturbing activities in order to keep disturbed acreage to a minimum. This would provide for continued mining operations while rehabilitating critical wildlife habitat at the earliest possible opportunity.

8. The potential to sell forest products from the Sweet Grass Hills would be determined in the activity plan for this ACEC. Forest product disposal under the activity plan would conform to other resource restrictions. Only minor forest products may be sold pending completion of the activity plan..

Cow Creek Implementation

This guidance would be followed until an activity plan is completed which would use this guidance to identify specific management actions. The plan would provide guidance to preserve scenic, interpretive, recreation and paleontological values in the Cow Creek area associated with the Nez Perce National Historic Trail.

The BLM would coordinate this plan with the *guidance provided in the comprehensive Nez Perce Trail Management Plan prepared by the* USFS.

The BLM would reevaluate and adjust the visual management ratings in the area. These ratings would be used to determine whether any projects would impact the scenic quality and if so, what mitigating measures would be necessary prior to authorizing the project. The BLM would manage the area with a strong emphasis on riparian management. Existing allotment management plans would be revised to incorporate grazing management practices to improve riparian community conditions. *Management* emphasis would be to discourage or prevent livestock congregation along the bottoms *to maintain or enhance riparian vegetation.* The BLM would protect paleontological sites within the ACEC from surface disturbance by other management activities. Scientific use of the resource would be allowed. Any future ROW grant would be based on valid, existing rights within the corridor. All such *significant* developments would be subject to strict visual and reclamation stipulations.

Upper Missouri National Wild and Scenic River Management

The BLM would provide recreational opportunities and visitor services consistent with the *Wild and Scenic Rivers Act, as amended.* Future developments would also mitigate impacts to natural and cultural resources. Mitigation measures would be determined after a site specific evaluation.

Visitor Services *Implementation*

The BLM would redetermine user capacity based on the Limits of Acceptable Change (see Appendix *2.10*). This process would, with public *participation*, identify how much environmental change would be acceptable. Management would keep the character and rate of change due to human factors within acceptable levels. Parameters to be considered during the review process would include but would not be limited to, vegetation change; amount of bare ground near a campsite; bankside trails; sanitation problems; litter; and available firewood.

The Fort Benton Visitor Contact Station would be maintained and operated to provide visitors with permits and information on the river. The *contact station* would also provide interpretive information on the cultural and natural history of the area under the provisions of the MOU with the NPS *or future legislation.* The ranger stations at Coal Banks and Judith Landing would provide permits and health and safety information to river users. All of these *ranger stations* would be operated from Memorial Day through Thanksgiving weekend, *as necessary and as funding levels permit.*

Areas would be developed for self guided interpretive study. These *developments* would be *at appropriate* geological, historical, cultural, paleontological value or natural areas. *Prior to developing interpretive sites for cultural*

resources, the site would be evaluated and mitigation developed to ensure potential impacts to the resources could be minimized. These developments may include interpretive signs and displays. Current sites which would be developed are Stafford Ferry, Cow Creek, Evans Bend, Steamboat Point, Little Sandy, and Hole-In-The-Wall. Other sites may be developed if there is substantial public use or where BLM acquires important new lands or major new resource discoveries are made. *Any signing would be consistent with visual resource management objectives.*

Recreational use of islands would not be permitted during deer fawning and waterfowl brood rearing times. Islands would be closed to use from April 1—May 15.

Facility Management *Implementation*

The BLM would continue to maintain the undeveloped sites by clearing brush (maximum 1/4-acre) for campsite location, *enforcing a pack in/pack out policy, and if necessary,* removing the trash left at these areas. All undeveloped sites in the recreational and scenic *segments* of the river would be signed. All sites would be shown on user maps.

Undeveloped sites may be upgraded to semi-developed sites in scenic and recreational *segments* if *one or more of* the following criteria are met—

(1) increasing use of the river or of undeveloped sites;

(2) impacts to soil and vegetation become long term; i.e., heavy use begin to compact soils and kill vegetation as determined by monitoring;

(3) sanitation becomes a health problem;

(4) additional sites are needed to rest existing campsites;

(5) better distribution of sites is needed.

The BLM would maintain all semi-developed sites. New sites would be developed *if one or more of* the above criteria are met. New capital improvements would be allowed if impacts *to cultural and natural resources* could be mitigated *to an acceptable level.* Improvements in the wild section would be allowed if the *sites* can be serviced by existing roads or by river. All improvements would comply with the Wild and Scenic Rivers Act, *as amended.*

Developed sites would be established and managed, in recreational segments, based on demand and economic feasibility.

The BLM would continue to manage state-*owned* sites under the Memorandum of Understanding with State of Montana. These sites would be managed under BLM management guidance for the river as presented in this RMP.

Private Sector Initiatives *Implementation*

The BLM would encourage private sector initiatives in development of river management opportunities. The UMNWSR offers a wide range of visitor opportunities, only some of which can be funded by the Bureau. To overcome these limitations, non-governmental entities, either individuals or institutions, can be used to accomplish goals compatible with UMNWSR management. These goals may or may not generate profit or result in permanent facilities along the river corridor.

A wide variety of activities could be generated by private sector initiatives. Livery services for boats or horses, overnight or longer lodging facilities or sales of food/water and other provisions to river visitors and guiding are services traditionally offered in this way. Among other possibilities would be opportunities for institutions to use the UMNWSR for touring and instructional purposes, for the development of privately funded research and for expanded use of the area in regional promotional activity.

If there is a need established for some type of facility, whether it be BLM or private sector initiative, or a cooperative BLM-private venture, the merits and economic feasibility would be assessed. The developments if feasible, would be managed under the guidance provided in the Wild and Scenic Rivers Act, as amended, this RMP, and the coordinated river activity plan.

Health and Safety *Implementation*

The BLM would continue and may expand visitor services operations to provide for public health, safety and law enforcement. Search and rescue operations and law enforcement would continue as a cooperative effort with local and state agencies.

BUDGET ASSUMPTIONS

The decisions outlined in the RMP will be implemented over a period of 10 to 15 years, depending on budget and staff availability. The current funding level would be adequate to implement the *Alternative A*, No Action Alternative. Alternative B would require a 3 to 5% increase and Alternatives C and D would require increases between 5 and 10%.

The extension of the visitor services at Fort Benton, Coal Banks and Judith Landing and the improvements of undeveloped sites along the UMNWSR would be responsible for the 3 to 5% increase (Alternative B). Implementing an intensive ORV use area and ROW avoidance areas would also require some additional administrative functions over the existing level.

The extended visitor services at Fort Benton, Coal Banks and Judith Landing would be the primary reason for a 5 to 10% increase (Alternatives C and D). In addition, Alternative C would require full BLM law enforcement responsibility, while Alternative D would expand the BLM's role in law enforcement and search and rescue. The implementation for the ACECs would require additional management associated with activity plans.

The implementation of ORV management would require an inventory of roads and trails in designated areas along with publishing the maps and signing of these areas.

Funding levels would affect *the* timing and implementation of management actions and project proposals but would not affect resource allocations made under this RMP.

MONITORING AND EVALUATION

The *impacts* of implementation, as seen through resource monitoring, will be evaluated on a periodic basis over the life of the plan. The general purposes of this resource monitoring and plan evaluation will be—

(1) to determine if an action is fulfilling the purpose and need for which it was designed, or if there is a need for modification or termination of an action;

(2) to discover unanticipated and/or unpredictable effects;

(3) to determine if mitigative measures are effective as prescribed;

(4) to ensure that decisions are being implemented as scheduled;

(5) to provide continuing evaluation of consistency with state and local plans and programs; and

(6) to provide for continuing comparison of plan benefits versus costs including social, economic, and environmental.

A specific monitoring plan was prepared (1984) for the wildlife, watershed and grazing management programs in each of the four resource areas included in the RMP area. These monitoring plans will be used to monitor the implementation of specific management guidance and actions which *impact* wildlife, watershed and grazing management.

Wildlife Resources

Monitoring is directed at the biotic resource components, using both temporary and permanent studies. The results of these studies can be used to determine responses in habitat condition and trend; food availability, composition, and vigor; changes in cover and habitat effectiveness; and habitat management objectives.

Some of the methodologies available include: canopy cover transects; browse transects; woody riparian survey and photo plots; habitat condition ratings; color-infrared aerial photography; fish, bird and mammals species composition and population surveys; waterfowl population dynamics; raptor use and mortality *from* powerlines; *pellet group transects*; and selected threatened and endangered species inventories.

Watershed Resources

Monitoring the impacts of management activities on watershed condition is done in the following ways: measuring ground cover to assess erosion and sedimentation potential; measuring runoff, sediment production, water quality and water quantity at stream gauging stations, studying runoff plots; monitoring streambank stability and riparian communities at selected sites; and establishing demonstration units to exhibit the affects of management on riparian communities; and monitoring observation wells for groundwater level and quality. Climatic data (precipitation, air temperature, soil moisture and soil temperature) will be collected and used in evaluation along with other monitoring data.

The type of monitoring is dependent upon the type and location of the activity. Monitoring parameters, levels, and frequency will be determined at the activity plan stage.

Grazing Management

The grazing *allotment* management plans *(AMP)* will provide the information needed to implement *and monitor* specific management decisions which *impact* watershed, wildlife and grazing management. Monitoring efforts will focus on vegetative trend, forage utilization, actual use (livestock numbers and periods of grazing) and climate *in the I category allotments*. The data collected from these studies will be used to evaluate current stocking rates, to schedule livestock moves from pasture to pasture, to determine levels of forage competition, *and* to detect changes in plant communities and to identify patterns of forage use. Some of the methodologies to be used include Daubenmire canopy transects, photo plots, key forage plant utilization transects, aerial and ground reconnaissance of animal numbers and grazing patterns, actual use questionnaires and low altitude aerial photography transects.

Priorities for monitoring grazing allotments are established in these *AMPs*. The methodology and intensity of study chosen for a particular allotment will be determined by the nature and severity of the resource conflicts present in that allotment.

SELECTION OF PROPOSED ALTERNATIVE

In selecting the proposed management plan each alternative was reviewed for:

1. effectiveness in resolving planning issues;

2. conformance with the guidance established by the planning criteria;

3. avoidance of unnecessary impacts to the human environment, and

4. responsiveness to public opinion.

Alternative D, as modified following public review, was selected as the Proposed Management Plan. This alternative represents a balanced management strategy for public lands and minerals within the planning area. The rationale for selecting Alternative D as the proposed management plan is presented below by issue.

Land Tenure Adjustment

Alternative D establishes management direction to accomplish public land adjustment and clearly identifies areas where BLM would like to increase its presence. It identifies criteria to evaluate private lands which may be acquired and constraints which must be met prior to disposal of public lands. A total of 50,117 acres have been identified for disposal. Of this acreage, 15,689 acres meet the sale criteria under FLPMA and an additional 34,428 acres may be evaluated for disposal by the sale criteria in Sec. 203(a)(1) of FLPMA, if in the public's interest. Alternative D increases BLM's flexibility in accomplishing land pattern adjustment in the planning area.

Off-Road Vehicle Management

Alternative D amends the ORV designations already developed under direction of EO 11644. Restrictions have been expanded to provide seasonal protection in areas with sedimentary breaks soils, and important wildlife habitat. The designations provide yearlong restrictions in WSAs, ACECs, the UMNWSR and in riparian areas. The lower 1/4-mile of the Gist Road would be closed. This alternative provides criteria for the designation of an intensive ORV use area in response to future demands. These designations address resource conflicts and concerns while recognizing the possible future demands for ORV use on the public lands.

Right-of-Way Location

Alternative D provides management direction for right-of-way location on the public lands and identifies exclusion and avoidance areas to protect sensitive resources. The majority of the public lands remain open to right-of-way location. Communication site location would not be permitted on the West and Middle Buttes of the Sweet Grass Hills. The resolution of this issue provides public land users with useful information for planning future ROWs on or across public lands.

Emphasis Areas

Alternative D designates and provides management guidance for three ACECs in the planning area. Public surface lands in the Kevin Rim; West, Middle and East Butte of the Sweet Grass Hills and the Cow Creek areas would be designated as ACECs. All three areas would be managed to allow multiple use activities while preserving and enhancing the resources for which the areas are designated. Management emphasis in Kevin Rim would be for raptor and cultural resources. Management in the Sweet Grass Hills would emphasize the protection of Native American traditional religious and cultural sites, raptor habitat and crucial wildlife habitat. The Cow Creek area would be managed to preserve and protect portions of the Nez Perce National Historic Trail, the Lewis and Clark National Historic Trail and the Cow Island Trail.

This alternative recognizes and provides management protection to unique resources in the planning area. The management guidance provides for the orderly development of consumptive uses, i.e., mineral development, while protecting the values for which the areas were designated.

UMNWSR Management

This alternative provides a balance of recreational opportunities within the river corridor by providing recreation opportunities and visitor services consistent with the Wild and Scenic Rivers Act, as amended, with an emphasis on mitigating impacts to natural and cultural resources disturbed by future development. This alternative plus the guidance given in the Management Common to All Alternatives section provides direction for managing recreation within the UMNWSR.

COMPARISON OF ALTERNATIVES

Table 2.5 presents a summary of resource allocations and management actions to resolve the issues as they would occur under each alternative. Table 2.6 summarizes the moderate and significant environmental consequences by issue for each alternative. For additional information on environmental consequences refer to Chapter 4, Environmental Consequences.

TABLE 2.5 WEST HILINE ALTERNATIVE SUMMARY TABLE

	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D - PROPOSED
LAND TENURE				
	BLM would attain a land pattern conducive to ease of management. Land adjustments would be by land exchange, acquisition and donation under the State Director's Guidance on Land Pattern Review and Land Adjustment. 44,143 acres would be available for exchange. Acquisitions would be concentrated in retention areas.	A more manageable land pattern would be attained through disposal by exchange or sale. 50,117 acres appear to meet FLPMA criteria for land adjustment through exchange and sale. Acquisitions would be concentrated in areas with large federal holdings.	BLM would retain the majority of the public lands. 15,689 acres would be available for disposal through exchange or sale. Acquisitions would be concentrated in special management and high value resource areas.	BLM land adjustment actions would consolidate high value resource lands. 15,689 acres meet FLPMA criteria for disposal through exchange or sale; 34,428 would be used for disposal by exchange, or by sale if they meet the sale criteria under FLPMA, for lands with higher resource values. Acquisition would be concentrated in special management and high value resource areas.
IMPLEMENTATION				
	Land adjustment would be by exchange, donation, and acquisition under the Land and Water Conservation Fund. Acquisitions will be concentrated in UMNWSR Corridor, North Blaine County, and the Sweet Grass Hills.	Land adjustment would be achieved primarily by exchange for lands of equal or better values. Acquisition would be concentrated in the Sweet Grass Hills, Kevin Rim, Marias River, UMNWSR Corridor, Cow Creek, the Rocky Mountain Front and important wildlife habitat areas.	Exchange would be the preferred disposal method to acquire lands of equal or greater resource values. Acquisitions would be concentrated in UMNWSR, Kevin Rim, Sweet Grass Hills, Cow Creek, Marias River, North Blaine County and important wildlife habitat areas.	Exchange would be the preferred method of disposal. Acquisitions would be concentrated in UMNWSR, Kevin Rim, Sweet Grass Hills, Cow Creek, Marias River, North Blaine County, important wildlife habitat and other areas within or outside the planning area.
Acreage Available for Disposal by Any Means		50,117 acres	15,689 acres	15,689 acres
Exchange	44,143 acres			34,428 acres
OFF-ROAD VEHICLE MANAGEMENT				
	Wilderness study areas and sedimentary breaks soils with slopes greater than 30% would remain designated "limited" for ORV use.	The BLM would maximize ORV use. WSAs would be designated "limited" areas.	Limited yearlong restrictions would apply to WSAs, ACECs, UMNWSR, sedimentary break soil areas and riparian areas; seasonal restrictions would apply in important wildlife areas. The Gist Road would be designated "closed" from the cabins to the river (1/4 mile).	Limited yearlong restrictions would apply to WSAs, ACECs, UMNWSR, and riparian areas; seasonal restrictions would apply in important wildlife areas and areas of sedimentary soils. The Gist Road would be designated "closed" from the cabins to the river (1/4 mile).
IMPLEMENTATION				
	Publish ORV map and sign area.	Publish ORV map and sign WSAs. Designate and manage an intensive ORV use area of about 640 acres using criteria in the document.	Inventory roads, trails, and ways in above areas, publish map of road restrictions for each area. Sign areas.	Inventory roads, trails, and ways in above areas, publish map of road restrictions for each area. Sign areas. An intensive ORV use area of about 640 acres may be designated based on public demand.
ACREAGE DESIGNATED				
Open	477,763	594,098	197,299	197,984
Limited				
Yearlong	148,335	32,000	329,794	130,070
Seasonal	0	0	99,000	298,039
Closed	0	0	5	5

TABLE 2.5 WEST HILINE ALTERNATIVE SUMMARY TABLE (Continued)

	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D - PROPOSED
RIGHT-OF-WAY LOCATION				
	The planning area would remain open to lineal ROW and communication site location.	The BLM would permit lineal ROWs outside the Upper Missouri National Wild and Scenic River Corridor. The river corridor would be designated an avoidance area; windows would be provided through the UMNWSR Corridor. The entire planning area would remain open to communication site location.	The BLM would protect important natural and cultural resources by designating WSAs, the Sweet Grass Hills and Cow Creek ACECs, riparian areas and areas of sedimentary soils as avoidance areas. The UMNWSR and the Kevin Rim would be exclusion areas. Communication sites would not be permitted on the West and Middle Buttes of the Sweet Grass Hills.	The BLM would permit ROWs, subject to mitigation. The following areas would be avoidance areas for ROWs: scenic and recreational segments UMNWSR; ACECs; WSAs; riparian areas and sedimentary breaks areas. Windows would be provided through the UMNWSR Corridor, however the wild sections of the UMNWSR would be exclusion areas. No communication sites would be permitted on West and Middle Buttes.
IMPLEMENTATION				
	BLM would perform environmental review and stipulate necessary mitigating measures prior to authorization.	BLM would perform environmental review of ROW location projects. Mitigation of impacts would meet legal requirements.	BLM would attempt to route ROWs along existing corridors. If a location is in an avoidance area, the environmental analysis must show the disturbance can be fully mitigated.	In the UMNWSR, the BLM would attempt to route new facilities within a one mile corridor along existing facilities. If a ROW must be located in an avoidance area, the environmental analysis must show the disturbance could be adequately mitigated.
ACREAGE DESIGNATED				
Open	626,098	537,945	420,343	421,023
Avoidance	0	88,153	112,945	141,718
Exclusion	0	0	92,810	63,357
EMPHASIS AREAS				
	BLM would continue to manage the Kevin Rim, Sweet Grass Hills and Cow Creek areas under current guidance.	BLM would continue to manage the Kevin Rim, Sweet Grass Hills and Cow Creek areas under current guidance.	BLM would provide maximum protection to resources in Kevin Rim, Sweet Grass Hills and Cow Creek. The three areas would be designated ACECs.	BLM would provide protection to resources in Kevin Rim, Sweet Grass Hills and Cow Creek. The three areas would be designated ACECs.
IMPLEMENTATION				
KEVIN RIM				
	Kevin Rim would not be designated as an ACEC. Standard oil and gas stipulations would be applied to exploration and development activities.	Kevin Rim would not be designated as an ACEC. Standard oil and gas stipulations would be applied to exploration and development activities.	Public surface would be designated an ACEC. Special stipulations to protect raptors would be applied within the emphasis area (Appendix 2.2, Map 3 and Fig. 1.2). BLM would not authorize unmitigated surface disturbance activities within 1/4-mile of the base of the rim to protect cultural resources. New ROWs would not be permitted off the east side, nor would new ROWs be permitted if industry relinquishes present ROWs off the east side of Kevin Rim.	Public surface would be designated an ACEC. Special stipulations to protect raptors would be applied within the emphasis area (Appendix 2.2, Map 3 and Fig. 1.2). BLM would not authorize unmitigated surface disturbance activities within 1/4-mile of the rim to protect cultural resources. BLM would encourage ROW location off the west, rather than the east, side of the rim. An activity plan would identify the location and number of windows off the east side, if any.
ACEC Acreage			4,657 acres	4,657 acres

TABLE 2.5 WEST HILINE ALTERNATIVE SUMMARY TABLE (Continued)

	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D - PROPOSED
SWEET GRASS HILLS				
	The Sweet Grass Hills would not be designated as an ACEC. Current uses would continue under present guidance.	The Sweet Grass Hills would not be designated as an ACEC. Current uses would continue under present guidance.	The public lands on East, West and Middle Buttes of the Sweet Grass Hills would be designated an ACEC.	The public lands on East, Middle and West Butte of the Sweet Grass Hills would be designated an ACEC.
	Standard stipulations would continue to mitigate impacts to raptors, crucial wildlife areas and cultural resources.	Standard stipulations would continue to mitigate impacts to raptors, crucial wildlife areas and cultural resources.	Special stipulations to protect raptors would be applied within the emphasis area (Appendix 2.2, Map 3 and Figure 1.2).	Special stipulations to protect raptors would be applied within the emphasis area (Appendix 2.2, Map 3 and Figure 1.2).
	Existing allotment management plans (AMPs) would continue to be implemented.	Existing allotment management plans (AMPs) would continue to be implemented.	An activity plan would be developed to provide specific guidance addressing Native American religious concerns and future developments and to emphasize the maintenance of wildlife habitat.	An activity plan would be developed to provide specific guidance for addressing Native American religious concerns and future developments, emphasize the maintenance of elk and raptor habitat, and provide guidelines for the orderly development of mineral resources.
	The area would remain open to the operation of the mining laws.	The area would remain open to the operation of the mining laws.	The ACEC would be segregated from mineral entry by a protective withdrawal.	The area would remain open to the operation of the mining laws.
	The BLM would recommend revocation of 529.67 acres of BR withdrawal on East Butte. These acres would be opened to operation under the mining laws.	The BLM would recommend revocation of 529.67 acres of BR withdrawal on East Butte. These acres would be opened to operation under the mining laws.	The BLM would recommend revocation of 529.67 acres of BR withdrawal on East Butte. These acres would be included in the protective withdrawal for the ACEC.	The BLM would recommend revocation of 529.67 acres of BR withdrawal on East Butte. These acres would be opened to operation of the mining laws.
ACEC Acreage			7,952 acres	7,952 acres
COW CREEK				
	A management plan would be written in cooperation with USFS to manage the Nez Perce Historic Trail. Allotment management plans would be modified to incorporate riparian objectives.	A management plan would be written in cooperation with USFS to manage the Nez Perce Historic Trail. Allotment management plans would be modified to incorporate riparian objectives.	The BLM would prepare a coordinated activity plan providing guidance for the preservation of the scenic, interpretive, recreational and paleontological values associated with the Nez Perce Trail; revise visual resource management ratings and emphasize riparian management. The plan would be coordinated with USFS on the management of the Nez Perce Trail.	The BLM would prepare a coordinated activity plan providing guidance for the preservation of the scenic, interpretive, recreational and paleontological values associated with the Nez Perce Trail; revise visual resource management ratings and emphasize riparian management. The plan would be coordinated with USFS on the management of the Nez Perce Trail.
ACEC Acreage			14,000 acres	14,000 acres

TABLE 2.5 WEST HILINE ALTERNATIVE SUMMARY TABLE (Continued)

	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D - PROPOSED
UPPER MISSOURI NATIONAL WILD AND SCENIC RIVER MANAGEMENT				
	BLM would continue to provide recreation opportunities consistent with the Wild and Scenic Rivers Act (PL 90-542) and amendment (PL 94-486).	Recreation opportunities in all segments within the corridor would be maximized with an emphasis on private sector initiatives. Management would be consistent with the Wild and Scenic Rivers Act (PL 90-542) and amendment (PL 94-486).	BLM management and private sector initiatives would emphasize the maximum preservation of the natural and cultural values of the corridor. Management would be consistent with the Wild and Scenic Rivers Act (PL 90-542) and amendment (PL 94-486).	BLM would provide recreation opportunities and visitor services consistent with the Wild and Scenic River Act (PL 90-542) and amendment (PL 94-486) with an emphasis on mitigating impacts to natural and cultural resources disturbed by future development.
IMPLEMENTATION				
VISITOR SERVICES				
	Floater use capacity would remain the same. Outfitters would be limited to 30% of the overall carrying capacity.	Floater capacity and outfitter limits would be eliminated.	Floater use capacity would be redetermined based on "limits of acceptable change" given in Appendix 2.10.	Floater use capacity would be redetermined based on "limits of acceptable change" given in Appendix 2.10.
	The visitor contact center at Fort Benton and ranger stations at Coal Banks and Judith Landing would operate from Memorial Day to Labor Day.	The visitor contact center at Fort Benton and ranger stations at Coal Banks and Judith Landing would operate from Memorial Day through Thanksgiving.	The visitor contact center at Fort Benton and ranger stations at Coal Banks and Judith Landing would operate from Memorial Day through Thanksgiving.	The visitor contact center at Fort Benton and ranger stations at Coal Banks and Judith Landing would operate from Memorial Day through Thanksgiving.
	Interpretive facilities and sites would be self-guided and keyed to the Floater's Guide.	Interpretive trails and sites would be developed at appropriate historical, archaeological, paleontological and natural area sites.	Interpretive activities would be keyed to the "Floater's Guide". Physical improvements and/or facilities would be restricted to major launch/takeout points.	Areas would be developed for self-guided interpretive study. Interpretive sites may include signs and displays.
	Recreational use of islands would be discouraged.	Islands would be available for recreational uses.	Islands would be closed to all uses.	Islands would be closed to recreational uses April 1 - May 15.
FACILITY MANAGEMENT				
	BLM would maintain undeveloped sites. Additional semi-developed sites would be allowed based on specific criteria in the document. Developed sites would be allowed at major launch/takeout sites in the recreational sections.	Undeveloped sites would be maintained and upgraded to semi-developed sites over the life of the plan. Additional semi-developed sites may be developed in all sections of the river in accordance with criteria listed. Developed sites would be allowed in the scenic and recreational segments of the river corridor.	BLM would maintain or relocate existing undeveloped and semi-developed sites. Additional sites may be developed only if they meet the criteria and impacts can be mitigated. Capital improvements would be restricted to the recreational sections. Developed sites would be restricted to launch/takeout sites in the recreational and scenic sections.	BLM would maintain undeveloped sites and may upgrade these sites if they meet criteria in the document. New semi-developed sites may be allowed if they meet the criteria and impacts can be mitigated. Developed sites would be restricted to the recreational sections of the river.
	BLM would continue management of state recreation sites under MOU with MDFWP.	BLM would not manage state recreation sites.	BLM would acquire the state recreation sites.	BLM would continue management of state recreation sites under MOU with MDFWP.
PRIVATE SECTOR INITIATIVES				
	Private sector initiatives would be limited to outfitting, guiding and boat rental.	A full range of private sector initiatives would be encouraged, ranging from campgrounds to marinas.	Major private sector initiatives would not be allowed on public lands. Private sector initiatives such as outfitting, boat rental, and campground/maintenance would be allowed.	Private sector initiatives (livery services, lodging and eating facilities, maintenance services) would be used to develop a wide range of visitor services.
	All private sector initiatives would be managed under the guidance in the RMP.	All private sector initiatives would be managed under the guidance in the RMP.	All private sector initiatives would be managed under the guidance in the RMP.	All private sector initiatives would be managed under the guidance in the RMP.
HEALTH AND SAFETY				
	BLM would continue to cooperate with state and local authorities responsible for law enforcement and search and rescue operations.	Law enforcement would be contracted to local sheriffs departments. Search and rescue operations would be the responsibility of local authorities.	BLM would assume responsibility for law enforcement. BLM would continue coordination with local authorities responsible for search and rescue.	BLM would continue the cooperative efforts and may expand its role in law enforcement and search and rescue operations.

TABLE 2.6 SUMMARY IMPACTS TABLE

	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D — PROPOSED
LAND TENURE ADJUSTMENT				
Minerals			If lands with both surface and subsurface rights are obtained, in the Sweet Grass Hills, a protective withdrawal would be pursued. This would be a locally significant, long-term negative impact to mineral development in the area.	
Vegetation	Disposal of 44,143 acres could result in a moderate negative impact if these lands were farmed, thereby destroying native vegetation.	Disposal of 50,117 acres could result in a moderate negative impact if these lands were farmed, thereby destroying native vegetation.	Disposal of 15,689 acres could result in a moderate negative impact if these lands were farmed, thereby destroying native vegetation.	Same as "B"
Wildlife and Fisheries	The loss of 17,858 acres of crucial big game and upland game habitat would be a moderate negative impact.	The loss of 9,885 acres of crucial big game and upland game habitat would be a moderate negative impact.	The loss of 625 acres of crucial big game and upland game habitat would be a moderate negative impact.	Same as "B"
	Acquisitions of crucial value wildlife areas would produce moderate positive impacts.	Same as "A"	Same as "A"	Same as "A"
Grazing	There could be a moderate positive impact to management opportunities if private land is acquired in areas of predominately public land. A total of 44,143 acres could be exchanged.	There could be a moderate positive impact to management opportunities if private land is acquired in areas of predominately public land. A total of 50,117 acres could be exchanged.	There could be a moderate positive impact to management opportunities if private land is acquired in areas of predominately public land. A total of 15,689 acres could be exchanged.	Same as "B"
		If these 50,117 acres were sold there would be a moderate decrease in grazing management opportunities.	If 15,689 acres were sold there would be a moderate decrease in grazing management opportunities.	Same as "B"
Recreation	Land adjustments could provide significant positive impacts because of increased public access and consolidated public lands.	Same as "A"	Same as "A"	Same as "A"
OFF-ROAD VEHICLE MANAGEMENT				
Soils	Open ORV use on 168,855 acres of sedimentary soils would create locally significant negative impacts because of increased erosion.	Open ORV use on 285,190 acres of sedimentary soils would create locally significant negative impacts because of increased erosion.		
	Limiting ORV use on 148,335 acres of sedimentary soils would create locally significant but moderate overall positive impacts through decreased disturbance to fragile soils.	Limiting ORV use on 32,000 acres of sedimentary soils would create locally significant but moderate overall positive impacts through decreased disturbance to fragile soils.	Limiting ORV use on 317,190 acres of sedimentary soils would result in locally significant but moderate overall positive impacts through decreased disturbance to fragile soils.	Same as "C"
	ORV use in riparian areas would create locally significant negative impact from erosion.	Same as "A"		
	ORV use could create locally significant impacts to soils along existing roads and trails as vehicles maneuver around rutted areas and potholes.	Same as "A"	Same as "A"	Same as "A"
Water	Open ORV use on 168,855 acres of sedimentary soils would create locally significant negative impacts because of increased erosion.	Open ORV use on 285,190 acres of sedimentary soils would create locally significant negative impacts because of increased erosion.	Same as "A"	Same as "A"
	Limiting ORV use on 148,335 acres of sedimentary soils would create locally significant but moderate overall positive impacts.	Limiting ORV use on 32,000 acres of sedimentary soils would create locally significant but moderate overall positive impacts.	Limiting ORV use on 317,190 acres of sedimentary soils would result in locally significant but moderate overall positive impacts because of decreased erosion.	Same as "C"
	ORV use in riparian areas would create locally significant negative impacts from increased sedimentation.	Same as "A"		
	ORV use could create locally significant impacts to water along existing roads and trails as vehicles maneuver around rutted areas and potholes.	Same as "A"	Same as "A"	Same as "A"
Vegetation	ORV impacts to vegetation could be locally significant and negative in an intensive ORV use area presently experiencing severe impacts in 6 acres.	ORV impacts to vegetation could be locally significant and negative in an intensive ORV use which may experience severe impacts on 20 acres.	Moderate positive benefits would result from greater restrictions on ORV use.	Same as "C"
Wildlife and Fisheries		Moderate impacts to wildlife would result from habitat deterioration and stress from social intolerance in the sedimentary breaks soil areas (Missouri Breaks).	Moderate positive benefits would occur from seasonal protection of crucial wildlife habitat.	Same as "C"
Cultural	The potential exists for locally moderate long-term impacts through the loss of cultural sites in areas open to ORV use.	Same as "A"		

TABLE 2.6 SUMMARY IMPACTS TABLE (Continued)

	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D — PROPOSED
Grazing		About 20 acres of vegetation in the intensive use area would be severely impacted, resulting in a locally significant negative impact.		
		RIGHT—OF—WAY LOCATION		
Soil	Locally significant negative erosion impacts would occur on 100,000 acres of sedimentary soils with slopes greater than 25% and riparian areas.	Locally significant negative erosion impacts would occur on 72,000 acres of sedimentary soils with slopes greater than 25% and riparian areas.	Locally significant impacts could occur with ROW location through the windows in the UMNWSR and associated disturbance in sedimentary breaks soil types and in riparian areas.	Same as "C"
Water	Locally significant negative impacts to water quality could result from the runoff from 100,000 acres of sedimentary soils with slopes greater than 25%.	Locally significant negative impacts to water quality could result from the runoff from 72,000 acres of sedimentary soils with slopes greater than 25%.	Locally significant impacts could occur with ROW location through the windows in the UMNWSR and associated disturbance in sedimentary breaks soil types.	Same as "C"
Minerals	Leaving the planning area open to ROW location would result in a moderate positive impact to the minerals industry by allowing mineral companies to select the most cost effective route.		Requiring the minerals industry to locate pipelines around designated ROW avoidance areas would be a locally moderate negative impact.	Same as "C"
Vegetation			Moderate beneficial impacts would occur because ROWs would be excluded in several areas and avoided in several others.	Same as "C"
Wildlife	Locally significant negative impacts to raptors would occur because of construction, maintenance and physical hazards of transmission lines.	Same as "A"		
Social and Economics			A locally moderate negative impact to the mineral and utility industry would result from increased transmission line routing costs.	Same as "C"
		EMPHASIS AREAS		
Soil			COW CREEK — Intensive management of riparian areas would produce locally significant positive impacts to the soils in those areas.	Same as "C"
Water			COW CREEK — Intensive management of riparian areas would produce locally significant positive impacts to streambank stability and water quality.	Same as "C"
Minerals			KEVIN RIM — Stipulations to protect raptor species and cultural resources may significantly increase the operation costs for oil and gas developers.	Same as "C"
			SWEET GRASS HILLS — The protective withdrawal on the Sweet Grass Hills could result in a significant negative impact due to drainage of federal oil and gas by producing fee and state wells on adjacent lands.	
			SWEET GRASS HILLS — The additional workload involved in preparing a Plan of Operations, over that of a notice, and the need to wait for formal approval would be a moderate negative impact to operators and development of the mineral resources.	Same as "C"
	SWEET GRASS HILLS — Opening the BR withdrawal on East Butte to mineral entry would produce a significant positive impact for the minerals industry.	Same as "A"	SWEET GRASS HILLS — Placing the BR lands under protective withdrawal would be significant negative impact to the minerals industry. Exploration to assess mineral development potential and mining to extract economic deposits would not be allowed since there are no valid existing rights in the BR withdrawal.	Same as "A"
Vegetation	SWEET GRASS HILLS — Major hardrock mining development could produce locally significant negative impacts to vegetation.	Same as "A"	SWEET GRASS HILLS — Major hardrock mining developments on valid, existing claims could produce locally significant negative impacts to vegetation.	Same as "A"
			COW CREEK — Intensive management of riparian areas would produce locally significant positive impacts to vegetation.	Same as "C"

TABLE 2.6 SUMMARY IMPACTS TABLE (Continued)

	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE	ALTERNATIVE D — PROPOSED
Wildlife and Fisheries	KEVIN RIM — Surface disturbing activities could produce significant negative impacts to raptor breeding and nesting activities, which may result in nest or territory abandonment.	Same as "A"	KEVIN RIM — Restrictions on mineral leases and land use authorizations would produce locally significant positive impacts to raptors.	Same as "C"
			SWEET GRASS HILLS — Modifications in grazing management and raptor stipulations would produce locally significant positive impacts for elk and raptors.	Same as "C"
	SWEET GRASS HILLS — A large open pit hardrock mining operation could significantly reduce big game habitat.	Same as "A"	SWEET GRASS HILLS — Large open pit hardrock mining operations on valid, existing claims could significantly reduce big game habitat.	Same as "A"
			COW CREEK — Intensive management of riparian areas would produce locally significant wildlife habitat improvements.	Same as "C"
Cultural	KEVIN RIM — A Moderate negative impact could occur to cultural resources from unmitigatable oil and gas development.	Same as "A"	KEVIN RIM — The stipulations along the Kevin Rim escarpment would produce a moderate positive impact for cultural resources.	Same as "C"
	SWEET GRASS HILLS — Significant negative impacts to Native American religious sites would occur from mineral and other developments in the Sweet Grass Hills.	Same as "A"	SWEET GRASS HILLS — Restriction on mining activity and greater emphasis on resource management could produce a moderate positive impact for cultural resources.	Same as "A"
			COW CREEK — More stringent development standards would produce significant positive impacts for cultural resources.	Same as "C"
	SWEET GRASS HILLS — Opening the BR withdrawal on East Butte to mineral entry would produce a significant negative impact to cultural resources.	Same as "A"		Same as "A"
Recreation			COW CREEK — A moderate positive impact would occur because visual and natural qualities would be enhanced and protected.	Same as "C"
Social and Economics			KEVIN RIM — Restrictions along the Kevin Rim escarpment could result in a locally significant increase in operating costs for oil and gas developers, but would have a minor overall impact to the economy of the planning area.	Same as "C"
	SWEET GRASS HILLS — This alternative could cause a significant impact in the solitude and undisturbed environment of the area for Native Americans who use it for religious purposes.	Same as "A"	SWEET GRASS HILLS - This alternative could result in a moderate impact due to the restrictions on the disturbance to the solitude and environment in the area of valid, existing mining claims. This would impact Native Americans using the area for religious purposes.	Same as "A"
UPPER MISSOURI NATIONAL WILD AND SCENIC RIVER				
Soil		Increased human traffic at recreation facilities along the UMNWSR would reduce streambank stability and cause soil compaction. This would be a localized moderate impact.		
Minerals	Drainage of federal minerals by future private and state wells adjacent to BLM lands could be a significant negative impact.	Same as "A"	Same as "A"	Same as "A"
Vegetation	Locally significant impacts could occur because of increased soil compaction, erosion, and trampling with a large increase in visitor use.	Same as "A"		
Cultural			Moderate positive impacts would occur due to increased public awareness of cultural values through increased development of interpretive sites.	Same as "C"

CHAPTER 5

CONSULTATION AND COORDINATION

Consultation and coordination has been an important part of this planning effort since its beginning in 1984. Public meetings, informational mailings and individual contacts with other governmental agencies, Native American tribes, interest groups and the general public were used to gather *comments* for this RMP. This *information* helped identify the issues, criteria, and alternatives discussed in this document. Coordination and consultation continued through the review of *the draft Resource Management Plan/Environmental Impact Statement (RMP/EIS)* and preparation of the final *RMP/EIS*.

Public meetings to gather public *opinion* were held at the alternative development stage and again after the draft RMP/EIS was published. *The following* public meetings (including location, date and the number of public attending) *were held during the alternative development process*: Great Falls (9/29/86-6); Shelby (9/30/86-19); Chester (10/1/86-6); Lewistown (10/1/86-5); Havre (10/2/86-17); Fort Benton (10/7/86-10); Malta (10/8/86-3); and Winifred (10/9/86-3). *The following* public meetings (including location, date and the number of public attending) *were held to gather comments on the draft document*: Havre (7/13/87-11); Great Falls (7/14/87-6); Shelby (7/15/87-15); Chester, (7/16/87-11); Lewistown (7/20/87-12); and Fort Benton (7/21/87-4).

Those aspects of public land management that received little comment, or were subject to administrative or legal constraints, were eliminated as potential planning issues, thus streamlining the process.

The Bureau of Land Management (BLM) coordinated and consulted with federal, state, and local agencies once *the* tentative alternatives were completed to identify conflicting management objectives and potential impacts to adjacent land managing agencies.

Consultation under Section 7 of the Endangered Species Act has been *completed* with U.S. Fish and Wildlife Service (USFWS). The final RMP/EIS contains the Biological Assessment and USFWS Biological Opinion *(see Appendix 4.2)* on the impacts from the RMP/EIS to threatened and endangered species.

PUBLIC INVOLVEMENT

A Notice of Intent, formally announcing the beginning of the planning process, was published in the *Federal Register* in December, 1983. The public has been informed of and involved in the planning process through *Federal Register* notices, news releases, direct mailings, and public meetings.

These releases ranged in subject matter from general announcements at the beginning of the planning process to dates and places of specific public meetings and requests for public comments. Public participation activities are listed chronologically in Table 5.1. Complete records of public comments and involvement are on file in the Lewistown District Office.

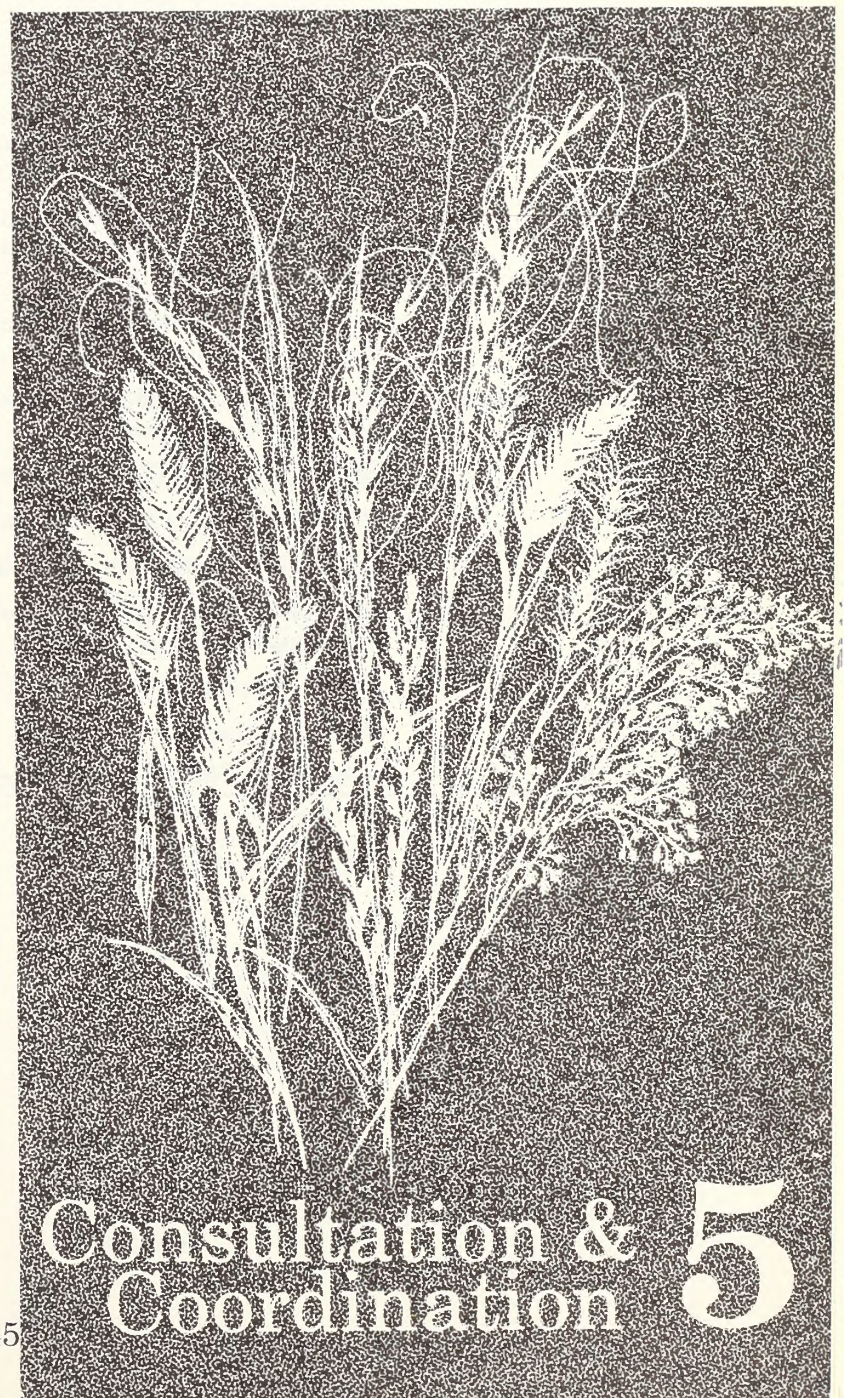


TABLE 5.1
PUBLIC INVOLVEMENT

Date	Action
December 1983	Notice of Intent to prepare an RMP/EIS for the West HiLine was published in the Federal Register.
June 1984	Issue brochure was sent to 596 agencies, organizations and individuals.
July 1984	Public meetings to identify issues were held in Havre and Great Falls, Montana.
June 1985	Federal Register Notice requesting coal or other resource information.
March 1986	Press release to local media identifying the availability of the District Manager's concept and planning criteria.
August 1986	Press release to local media identifying expansion of planning boundaries and alternatives.
September 1986	Federal Register Notice filed, supplementing Notice of Intent to expand planning area (now includes entire UMNWSR corridor and associated public lands).
	Letters (1500) sent to those on mailing list requesting comments on alternative brochure and the recently added river management issue. Letters also informed public of upcoming public meetings.
	Press release to local media identifying the availability of alternative brochures and upcoming public meetings.
September/October 1986	Public meetings held in eight west HiLine communities to gather information on alternative development.
October 1986	Briefings held for Rocky Boy and Blackfeet tribes and Governor's Office.
May 1987	Press release to local media identifying the availability of the draft RMP/EIS.
	Federal Register Notice of Availability.
June 1987	Press release to local media identifying the availability of the draft RMP/EIS and upcoming public meetings.
	Federal Register, EPA Notice of Receipt, beginning the 90 day review period.
July 1987	Public Meetings.
September 1987	Public comment period on the draft RMP/EIS closed.

CONSISTENCY

The BLM's planning regulations require that resource management plans be "consistent with officially approved or adopted resource related plans of other federal agencies, state, and local governments, and Indian tribes, so long as the guidance and resource management plans are also consistent with the purposes, policies, and programs of federal law, and regulations applicable to public lands...". *(43 CFR 1610.3a).*

All federal, state, local *agencies* and tribal councils *were* requested to review the *draft RMP/EIS* document for inconsistencies with their plans and inform the BLM of any inconsistencies. *The Governor of Montana will complete his consistency review by the close of the protest period.*

DISTRIBUTION LIST

BLM requested comments from interest groups and individuals; from federal, state, and local agencies and Native Americans. The following is a partial list of organizations and agencies that received this document.

County Commissioners and Boards of Planning

Blaine County Commissioners
Chouteau County Commissioners
Fergus County Commissioners
Glacier County Commissioners
Hill County Commissioners
Liberty County Commissioners
Phillips County Commissioners
Toole County Commissioners

Montana Chamber of Commerce
Fort Benton Chamber of Commerce
Havre Chamber of Commerce
Malta Chamber of Commerce
Lewistown Chamber of Commerce

Blaine County Conservation District
Chouteau County Conservation District
Glacier County Conservation District
Hill County Conservation District
Liberty County Conservation District
Toole County Conservation District

State

Honorable Ted Schwinden
Department of Health and Environmental Sciences
Dept. of Community Affairs
Dept. of Natural Resources and Conservation
Department of State Lands
Department of Natural Resources
Department of Fish, Wildlife & Parks
State Historic Preservation Office
State Planning Coordination Office

Congressional

Honorable Max Baucus
Honorable Ron Marlenee
Honorable John Melcher
Honorable Morris K. Udall Committee on Interior and Insular Affairs
Honorable Pat Williams
Honorable James A. McClure Committee on Commerce & Natural Resources

Federal Agencies

Advisory Council on Historic Preservation
Bonneville Power Administration
Bureau of Indian Affairs
  Fort Belknap Tribal Council
  Blackfeet Tribal Council
  Rocky Boy Tribal Council
  Fort Peck Tribal Council
  Nez Perce Tribal Council
  Salish and Kootenai Tribal Council
Bureau of Mines
Bureau of Reclamation
CMR National Wildlife Refuge
Department of Army Corps of Engineers
Department of Energy (Western Area Power Administration)
Department of Transportation
Environmental Quality Council
Federal Aviation Administration
Federal Highway Administration
Federal Housing Administration
National Park Service
Soil Conservation Service
United States Department of the Interior
  Missouri River Basin Commission
  Field Solicitors Office
US Environmental Protection Agency
US Army Corps of Engineers
US Dept. of Commerce
US Fish & Wildlife Service
US Forest Service
North Central Forest Experiment Station
US Geological Survey

Special Interest Groups

American Fisheries Society
American Horse Protection Assoc.
American Mining Congress
American Canoe Assoc.
American River Recreation Assoc.
American Rivers Conservation Council
Billings Rod & Gun Club
Blood Indian Tribal Council, Alberta, Canada
Defenders of Wildlife
Fergus County Livestock Association
Fishing & Floating Outfitters Association of Montana
High Country News
Humane Society of the US
Independent Petroleum Assoc. of Mtn. States
Intermountain Forest Industry Association
International Society for the Protection of Mustangs and Burros

Izaak Walton League of America
Lewistown Rod & Gun Club
Laurel Rod & Gun Club
Lehmann and Associates
Missouri River Canoe Rental
Missouri Basin Inter. Ag. Comm.
Missouri River Outfitters
Mitchell Grazing Association
Montana Association of State Grazing Districts
Montana Automobile Assoc.
Montana Coal Council
Montana Council of Cooperatives
Montana Farm Bureau
Montana Farmers Union
Montana Geological Society
Montana Historic Society
Montana Petroleum Association
Montana Public Lands Council
Montana River Outfitters
Montana Stockgrowers Association
Montana Wilderness Association
Montana Woolgrowers
Montana Wildlife Federation
National Audubon Society
National Coal Assoc.
National Council of Public Land Users
National Wildlife Federation
Natural Resource Defense Council, Inc.
Nature Conservancy
Nevada Outdoor Rec. Assoc., Inc.
Northern Montana Oil & Gas Assoc.
Northern Plains Resource Council
Northwest Mining Assoc.
Overthrust Foundation
PA Coop Wildlife Research Unit
Public Lands Institute
Reserved Water Rights Compact Comm.
Rocky Mountain Oil & Gas Association
Sierra Club
Signal Butte Grazing Assoc.
Society for Range Management
Square Butte Grazing Assoc.
The Wilderness Society
The Wildlife Society
Trout Unlimited
Western Environmental Trade Assoc.
Western River Guides Assoc.
WIFE
Wilderness Institute
Wild Horse Organized Assoc.
Wild Horse Research Farm
Yellowstone Valley Audubon Society
Yellowstone Snowmobilers Assoc.

Other Businesses and Organizations

ABN Ranch Inc.
AIRO Drilling Corp.
Amax Exploration
American Colloid Co.
American Petrofina Co. of Texas
Anaconda Minerals Co.
Amoco Production Co.
ARCO Coal Co.
Arrowhead Farms
Atlantic Richfield Co.
JR Bacon Drilling Inc.
Bailey Land & Livestock Inc.
Balcron Oil Co.
Beren CIRO
Big View Ranch
Brummer Farm
Exxon USA
Blaine Cty Abstract Co.
Branch Oil & Gas Inc.
Bronco Exploration
Buckhorn Petroleum Co.
Gale Butterfield Inc.
Carson Min. Consult. Inc.
Celsius Energy Corp.
Cenex
Century Oil & Gas
Champlin Petroleum Co.
Chevron USA Inc.
Chevron Resources Co.
Christofferson Land & Cattle
Chippewa-Cree Tribal Business Council
Cities Service Oil & Gas Corp.
City Oil Company
Eastern Montana College
CNG Producing
Coal Creek CSGD
Coastal Oil & Gas Corp.
Comanche Drilling Co.
Conoco Inc.
Fed. Coal Acquisition Group
Croft Petroleum Company
Cronk Ranch Inc.
Crown Central Petroleum Corp.
Czar Resources
D A S Resource Ventures Inc.
Damson Oil Corp.
Davis Oil
Davies Ranch
Energy Development Board of Mercer County
DEPCO Inc.
Doane Western Co.
Energy Mining & Minerals
Eastern American Energy Corp.
Elenberg Exploration Inc.
Elloam Grazing Assoc.
Energetics Inc.
Energy Fuels Corp.
Energy Reserves Group Inc.
Eureka Grazing Assoc.
Exxon
Falcon-Colorado Expl. Inc.
5 H Cattle Company
Flying J Exploration & Production Inc.
Four Corners Supply Inc.
Freeport Exploration Co.
Frontier Exploration Company
Fuel Resources Dev. Co. FUELCO
Fulton Producing Co.
General Agriculture Corp.
GEO Research Inc.
Gordon Cattle Company
Grass & Sons, Inc.
Great Northern Drilling Co. Inc.
Gulf Oil Exploration & Production Co.
H & H Land Co.
Halliburton Co.
Hancock Enterprises
Hardrock Oil Co.

Hasquet Prairie Co.
Hill County Electric Coop Inc.
HKM Associates
Homestake Oil & Gas
Huartson Ranch
Husky Oil
Investestate
IX Ranch Company
Jack Grynberg & Assoc.
J M Resources Inc.
Juniper Oil & Gas
Kalanick Ranch Inc.
Kaun Grain & Livestock Co.
Knottnerus Inc.
Lazy K 6 Ranch Inc.
Lenington Farms Inc.
Lewis & Clark Tours
Lightning Productions Inc.
Lincoln Farms Inc.
Lonesome Prairie Farms Inc.
Lost Ridge Land & Cattle
Louisiana Land & Exploration Co.
Love Oil Co Inc.
Luff Exploration Co.
Lunds Heart Y Ranch
MacDonald Farms Inc.
Maddox Ranch Co.
Marathon Oil
Marquis Petroleum Corp.
Marias River Electric Coop Inc.
McCann & Son Inc.
Lawrence J McCarthy & Assoc.
McCartney Lands & Minerals
McColly Ranch Inc.
Meissner Ranches Inc.
Meridian Land & Mineral Co.
Meridian Oil Inc.
Mariah Oil & Gas Inc.
Minden Oil & Gas Inc.
Minerals Exploration Coalition
Mitchell Ranch
Mobil Oil
Montana Flycast Guide Service
Montana Env. Information Center
Montana Pacific Oil & Gas Co.
Montana Power Co.
Monterray Petroleum
Mountain States Petroleum Corp.
Murphy Oil USA Inc.
N Hanging 5 Ranch
Nace Ranch Co.
North American Coal Corp.
North American Resources
Northern Natural Gas Co.
Northern Pacific Oil & Gas
Northern Telephone Coop. Inc.
P & M Petroleum
Petrie Ranch Partnership
Petro-Lewis Corp.
Petroleum Corp. of America
Phillips Petroleum Co.
Pugsley Ranches Inc.
Quintana Petroleum Corp.
Ray Harrison Drilling
Ranck Oil
Red River Oil & Gas Inc.
Robinson Land Company
S & J Operating Co.
S & W Petroleum Consultants Inc.
S Bar B Ranch Co.
Sand Creek Ranch
Schellin Ranch Co.
Schiff & Jackson Oil
Shell Oil Company
SHADCO
Siebrasse Farms Inc.
Sierra Oil & Gas Co.
Sky Ranch
SOHIO Petroleum Co.
Somont Oil Co. Inc.
Stillwater PGM Resources
Stovall Oil Co.
Stroock Leasing Corp.
Stuker Land Co Inc.
Sunburst Exploration Inc.
Tenneco Oil Exploration & Production
Terra Resources Inc.
Texaco
Texas Gas Expl. Corp.
The Guide & Outfitter
Three River Telephone Coop. Inc.
Triangle Telephone Coop Assoc. Inc.
Tricentrol United States
True Oil Co.
Union Oil Company
Union Oil Company of California
United States Energy
Universal Gas Inc.
Ed Vanderpas Oil
Weaver Cattle Co.
Western Energy Co.
Western Natural Gas Co.
Western Reserves Inc.
Westmoreland Resources
Wilcox Family Partners
Williston Basin Interstate Pipe Co.
Wood River Ranch
Worrall & Sons Inc.
Xeno Inc.
Yellowstone Petroleum Inc.

The RMP/EIS is available at county libraries. In addition the draft RMP/EIS has been mailed to an additional 300 individuals.

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RESPONSE TO PUBLIC COMMENTS

The following are BLM's responses to each identified comment or question concerning the draft West HiLine RMP. Each response is numbered to correspond with the appropriate comment or question.

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Endangered Species, Field Office
Federal Bldg., U.S. Courthouse
301 South Park
P.O. Box 10023
Helena, Montana 59626

DM L & RR
ASSOC. DM PA
ADMIN. RVR
P. EA MIN
OPR JUD
USDI JUN 11 87 BLM
RECEIVED
LEWISTOWN, MT
ACTION

IN REPLY REFER TO:
M.02(I) Lewistown Dist./
West HiLine RMP

June 10, 1987

MEMORANDUM

To: District Manager, Bureau of Land Management, Lewistown District Office, Lewistown, MT

From: Acting Field Supervisor, Fish and Wildlife Service, Fish and Wildlife Enhancement, Helena, MT

Subject: Biological Assessment for the West HiLine Resource Management Plan

We have reviewed the subject biological assessment and your "no effect" determination for Federally listed species which may occur in the planning area. We concur with your determination that the preferred alternative will not affect the bald eagle (Haliaeetus leucocephalus), peregrine falcon (Falco peregrinus), black-footed ferret (Mustela nigripes), or the piping plover (Charadrius melodus).

Likewise, we concur that the management prescriptions for the Kevin Rim and Sweet Grass Hills have long-term potential for beneficial effects for raptors, including peregrine falcon recovery. We agree with protecting the long-term potential of this habitat for peregrine falcons, even if a peregrine hacking program may not be implemented in this area in the immediate future. The ongoing recovery of the peregrine falcon will enhance the potential of natural reestablishment of wild peregrine falcons eyries in the area. We support and commend your efforts to protect historical or potential peregrine eyries and the potential for use of these areas by peregrine falcons in the future.

We appreciate the quality of the biological assessment you provided. We found it easy to understand, well organized and clear and direct in its presentation of information about the Bureau's resource goals and responsibilities to protect listed species and enhance their recovery. We thank you and your staff for your efforts to address listed species and the issues related to implementing the preferred alternative of the Plan.

Ron Crete

cc: State Director, BLM, State Office, Billings, MT
Acting State Supervisor, FWS, FWE/ES, Billings, MT

RAC/clh

"Take Pride in America"

UNITED STATES GOVERNMENT

memorandum

DATE: JUN 15 1987

REPLY TO ATTN OF: Division of Programs, Land and Minerals, Code 360

SUBJECT: West HiLine Draft Resource Management Plan/Environmental Impact Statement (RMP/EIS)

TO: District Manager, Bureau of Land Management, Lewistown District Office

From: Billings Area Director

1 This office has reviewed the subject draft Resource Management Plan/Environmental Impact Statement (RMP/EIS). There are a few comments we would like to make. We believe we have the latest errata sheet which was attached to your June 3, 1987, letter. There was no mention of what we feel is an error in the abstract. The last sentence of the third paragraph states: "Alternative D, The Preferred Alternative reflecting a balance of Alternatives C and D". Alternative D cannot be a combination of C and D. Such a combination would make Alternative D actually the same as Alternative C. We assume Alternative D is actually a combination of Alternatives B and C.

Regarding the actual content of the Alternatives, the focus should be the consolidation of public lands, so that they are accessible for multiple use by the public as well as more successfully managed. Alternatives B, C, and D call for disposal of public land. There is an "emphasis" on exchange, but the RMP/EIS does not mandate exchange. As you are aware, there is a paucity of public land in eastern Montana as it is. Disposal of more of this land can only make a poor situation worse. Alternative B states that Bureau of Land Management (BLM) land patterns would be "blocked up" in the HiLine area and the Rocky Mountain Front. This could be accomplished by exchanges. However, exchanging public land in eastern Montana for Rocky Mountain Front land does not help the public in eastern Montana. The eastern Montana land is near and/or adjacent to the Blackfeet, Rocky Boy's and Fort Belknap Indian Reservations.

A decline in the quantity of public lands in this area will exert more pressure on the reservations. This pressure will be manifested as people seeking land for off-road vehicles, hunting, fishing, and other recreation activities.

The three Alternatives B, C, and D all address enhancing management options for grazing by consolidation of BLM lands. Grazing is one of the principle uses of public land. However, land used primarily for recreation is beneficial to more of a diversity of people, and in essence used by the "public". If grazing land consolidation is to be accomplished, it should be emphasized that it should not be at the expense of recreation lands.

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

OPTIONAL FORM NO. 10
(REV. 7-76)
GSA FPMR (41 CFR) 101-11.6
5010-112

No. 1

The abstract has been revised.

Federal administration of lands is all that has protected some lands in native vegetation from eolian and water induced erosion caused by farming unsuitable soils. Alternatives B, C, and D all mentioned that a change in land administration from Federal to private would change vegetation types. A high degree of scrutiny will have to be used in land exchanges and disposal to avoid the ramifications associated with farming native vegetation sites.

2 Our next comment regards the potential disposal of land by sale, described in Alternatives B, C, and D. We request that the Indians on the reservation be offered the land adjacent to the reservations with the right of first refusal. The rationale for this solicitation lies in the fact that this land was aboriginal land ceded to the United States through treaties. As such, the various tribes should have the option of reacquiring the land and reestablishing the reservation.

The section pertaining to Upper Missouri National Wild and Scenic River Management leaves us with a question. Under Concession Management, services such as outfitting, boat rental and campground/maintenance would be allowed. 3 Is there a prioritization or methodology to determine who will be granted a license or concession permit? Also, how many concessions of the same nature would be allowed?

4 The minerals EMPHASIS AREA states that under Alternatives C and D, a protective withdrawal on the Sweet Grass Hills could result in drainage of Federal hydrocarbons. If surface and mineral rights are "blocked up" in this area, there would not be state or fee lands on which offending wells could be drilled. If producing wells exist, the field should be developed anyway to maximize recovery of the natural resource, and royalties to the U.S. Government.

5 The Summary Impacts Table on page 36-40 could use some entries in numerous grid blocks which are presently vacant. If they are the same as another column they should be designated as such. An example is under OFF-ROAD VEHICLE MANAGEMENT, Wildlife and Fisheries, Alternatives A and C.

6 Under Mineral Resources, Coal, (page 45) it is stated that "Shippable deposits in the planning area would be localized in relatively rare areas. . . with thin overburden (<0')." No overburden on the coal will lead to oxidized and weathered coal which is not shippable or strippable (which we think this section refers to). The content of the paragraph is correct, stating that localized seams are passed over in favor of the more economically strippable coal in the Powder River Basin.

This office is pleased that the RMP/EIS addresses the cultural resources of the area. These include areas of historic and archeological significance. The Native American religious sites in the area are not replaceable. The Washington Office and State Director's

No. 2

The public land sale regulations do not have provisions for establishing a preference right for any individual. The regulations do allow, at the discretion of the BLM, the latitude to establish modified or direct public sales. These sales would allow an individual(s) to acquire public land by meeting the highest bid (modified) or without competition (direct sale). The use of modified and direct sales is decided on a case-by-case basis.

No. 3

The guidelines and criteria to determine if a concession permit would be granted and how many permits would be allowed will be addressed in the Coordinated Activity Plan for the UMNWSR which is scheduled for revision. The public will have an opportunity to comment on proposed criteria for private sector initiatives at that time.

No. 4

The protective withdrawal would only be pursued under Alternative C. The withdrawal would be applied to the federal mineral estate underlying the ACEC.

No. 5

The vacant blocks in this table indicate that impacts would be minor or would not occur and are intended to make this table easier to read.

No. 6

Shippable should have read strippable. This section on coal resources has been revised and this sentence has since been deleted. For more information please refer to the errata entry for page 45, column 1, paragraph 6.

Land Tenure Adjustment guide establishes the criteria for acquisition and disposal of land parcels. As such, we are confident that prior to disposal, the land will be archeologically surveyed and high research value, scarce or unique sites will be retained.

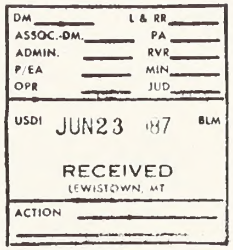
The brief review we have accomplished indicates that neither the Consumptive Use emphasis option (Alternative B) nor Alternative C, the protection emphasis option is in the public's best interest. A combination of the alternatives on a nearly site or geographically specific basis is most beneficial. Refinements in the combination may be helpful.

Thank you for the opportunity to comment on this RMP/EIS. Questions or clarification can be directed to Mr. Richard Stefanic at FTS 585-6145.

United States Department of Agriculture
Soil Conservation Service
Federal Building, Room 443
10 East Babcock Street
Bozeman, MT 59715

June 18, 1987

Mr. Wayne Zinne, District Manager
Lewistown District Office
Bureau of Land Management
Airport Road
Lewistown, MT 59457



Re: West HiLine RMP/EIS Draft

Dear Mr. Zinne:

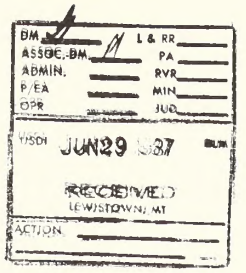
We have reviewed the above document and have no comments to offer.

Sincerely,

GLEN H. LOOMIS
State Conservationist

cc: Ron Batchelor, State Biologist, SCS, Bozeman, MT

Meridian
Minerals Company
A Subsidiary of Burlington Northern Inc.



Mr. Wayne Zinne
District Manager,
Lewistown District
Airport Road
Lewistown, MT 59457

Dear Mr. Zinne:

Meridian Minerals Company is a mining company with exploration interests in Montana. We have reviewed your current West HiLine RMP/EIS and wish to address the management alternatives. We believe that as much land as possible should be left in multiple use classification. Meridian is strongly in favor of Alternative A.

Should you wish to discuss this further or require additional information from Meridian, please do not hesitate to call me at (303) 930-9274.

Yours truly,
Charles Rech
C.W. Rech
Director
Land and Government Affairs

CWR/pjh:4692I

5613 DTC Parkway • Englewood, Colorado 80111 • 303 796-8586

United States Department of the Interior

BUREAU OF MINES

WESTERN FIELD OPERATIONS CENTER
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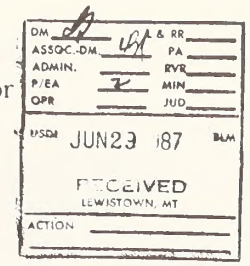


June 26, 1987

Memorandum

To: Wayne Zinne, District Manager--Lewistown District Office, Bureau of Land Management, Lewistown, Montana

From: Supervisor--Mineral Issues Involvement Section, Branch of Engineering and Economic Analysis

Subject: Draft Resource Management Plan/Environmental Impact Statement (RMP/EIS) for the West HiLine Planning Area of the Lewistown District, Montana

60

7 We have reviewed the West HiLine DEIS and found it nearly adequate. Although minerals and their management are discussed in the text, there are no maps which show areas of locatable, leasable (particularly oil and gas), or salable mineral potential. These areas need to be identified on large scale maps along with their associated commodities.

8 The discussion of minerals should include present activity in and near the areas of concern. This information will allow us a better understanding of the status of mineral activity in the area and the effect the proposed plans may have.

We concur with your preferred alternative and thank you for the opportunity to review your documents.

D'Arcy P. Banister

No. 7

The map on page 44 of the draft RMP/EIS shows oil and gas development potential. Additional maps showing locatable potential have been included in this document. A salable mineral potential map was not prepared. Locatable and salable mineral potential is addressed in the errata entry for page 45, column 2, paragraphs 1, 2, 3 and 4.

No. 8

BLM revised the text to discuss current minerals activities in the Sweet Grass Hills as shown in the errata entry for page 64, column 1, paragraphs 1 thru 8.

6a

Santa Fe Pacific Mining, Inc.

6200 Uptown Blvd. N.E. Suite 400
Box 27019
Albuquerque, New Mexico 87125
505/881-3050

July 17, 1987

District Manager
Bureau of Land Management
Lewistown District Office
Airport Road
Lewistown, Montana 59457-1300

Dear Sir:

Santa Fe Pacific Mining wishes to take this opportunity to comment on The Draft West HiLine RMP/EIS dated May 1987. Santa Fe Pacific Mining wishes to go on record in support of either alternatives A or B, particularly in the Sweet Grass Hills. We strongly oppose alternatives C and D because of the severe negative impacts which these alternatives will have on mineral development activities being conducted by our company and others in the Sweet Grass Hills. We believe the BLM has been deficient in its analysis of the hard mineral development potential in the Sweet Grass Hills. Santa Fe Pacific Mining also wishes to go on record in support of the BLM's proposal to revoke the Bureau of Reclamation withdrawal on the East Butte of the Sweet Grass Hills because of the significant positive impact for the minerals industry which revocation of this withdrawal would produce. 9

Finally, Santa Fe Pacific Mining especially opposes the designation of an Area of Critical Environmental Concern (ACEC) on the East Butte of the Sweet Grass Hills because of the significant negative impact to mineral exploration and development plans which our company is currently pursuing. BLM admits in its Draft RMP/EIS that the Sweet Grass Hills is an area of historic and current mineral development and production activity. ACEC designation by the BLM in the San Juan Basin of New Mexico has proven to be an effective deterrent to responsible mineral development because of the attendant increased regulatory burdens which BLM has imposed upon the mineral development proponents within the ACEC's. In this regard, we are therefore mystified as to why BLM should cite mineral activity as a reason for ACEC designation. 10

Since 1984 Santa Fe Pacific Mining, Inc., in conjunction with Ernest K. Lehmann and Associates, has been conducting an extensive exploration program in the Sweet Grass Hills. The joint venture to which we belong controls approximately 3,600 acres of patented and unpatented mining claims plus numerous leases. Recent results have brought about more focused attention on the Tootsie Creek area in the East Butte where widespread ore

No. 9

Since the draft was published several mining companies have given BLM access to their geologic data. This has allowed a more detailed assessment of the hardrock mineral potential for the Sweet Grass Hills. For more information please refer to the errata entry for page 64, column 1, paragraphs 1 thru 8; and the responses to comments 7 and 8.

No. 10

The alternatives are not citing mineral activity as a reason for ACEC designation. BLM has removed the historical mining references on pages 4 and 62 of the draft. The reasons for designation are to: protect potential habitat for the endangered peregrine falcon reintroduction; protect areas of traditional importance to Native American tribes; and to protect seasonally important elk and deer habitat.

grade gold values have been found. Our current exploration program is geared toward initial reconnaissance drilling of seven holes in 1987 with a much more intensive effort proposed for 1988 should the 1987 drilling program show that ore grade mineralization is found at shallow depths. Based on results to date, we believe that there is an extremely favorable likelihood of finding mineable gold deposits in our area of interest.

The Draft RMP/EIS conclusion that valid existing mineral rights would be maintained within its proposed Sweet Grass Hills ACEC appears to be simply an attempt to muffle opposition to an ACEC designation. Despite the existence of valid existing rights, it has been the experience of Santa Fe Pacific Mining, Inc. that ACEC designation, or any other protective BLM management status, is always an effective deterrent to responsible mineral development, despite the presence of valid existing rights, because of BLM's imposition of onerous and unreasonable surface use and access restrictions. It has been our company's experience in both Arizona and New Mexico that it is at best futile and disappointing to rely on such "boilerplate" language regarding the recognition of valid existing rights such as ours.

62

11 Under Alternatives C and D BLM states that it "will consult with Native Americans on proposed developments in the Sweet Grass Hills." Shouldn't BLM also consult with the office of the State Geologist, local land owners, owners of mineral rights, and those persons such as Santa Fe Mining which are conducting mineral exploration in the area?

Thank you for this opportunity to commment on this important RMP/EIS.

Very truly yours,

G. G. Byers
Director-Public Affairs

cc: State Director, U. S. Bureau of Land Management, Montana
Hon. Ron Marlenee, 409 Cannon House Office Bldg
Washington, DC 20515

No. 11

The American Indian Religious Freedom Act (AIRFA) requires federal government agencies to consult with Native American groups on any proposed federal action that may impact their religious practices. The purpose of such consultation is to help BLM identify what, if any, impact a BLM action may have on Native American religious practices and what, if any, mitigating measures would be justified. Any discussion of proposed impacts and possible mitigation would of necessity, involve the proponents of such actions (mining claimants, mineral developers, operators, etc.). It would also have to involve other regulatory or concerned agencies (State Lands, State Historic Preservation Office, Montana Bureau of Mines etc.) as well as those persons or groups proposing the action or who may be directly affected by it.

7a

ERNEST K. LEHMANN & ASSOCIATES OF MONTANA, INC.
GEOLOGISTS

Suite 790, Kickernick Building
430 First Avenue North
Minneapolis, Minnesota 55401
Tel. 612/338-5584
Telex 283091 ELA UR

July 9, 1987

U.S. Bureau of Land Management
Lewistown District Office
Airport Road
Lewistown, Montana 59457

Attn: Mr. Wayne Zinne, District Manager

Re: West HiLine Resources
Management Plan Draft EIS

Dear Mr. Zinne:

We are in receipt of the draft Resources Management Plan Environmental Impact Statement for the West HiLine area of Montana. We hope to present oral comments at either the July 20th or July 21st public hearings, but in any case wish to submit the following written comments for the record.

As a major holder of mining claims and as a major holder of mineral leases in the Sweet Grass Hills area, we will confine our comments to that geographic area. We will also confine our comments on those factors of the proposed plan which are relevant to the "hard" mineral industry.

Our twenty-year-old firm is composed of professionals active in the minerals industry in the US and abroad, both as consultants and on its own account. Based on our experience, we believe that we bring special expertise and a breadth and depth of experience to bear on the issues that the plan implicitly raises.

7b

ERNEST K. LEHMANN & ASSOCIATES OF MONTANA, INC.
GEOLOGISTS

Summary:

12 In summary, we believe that in the Sweet Grass Hills the only viable alternative presented is Alternative "A", the no-action alternative. This is because (1) the planning process has been flawed, (2) the plan is based on inadequate data, and (3) the data presented do not substantiate the "preferred" alternative ("D").

Flaws in the Planning Process:

13 We are deeply concerned with the lack of notification to us of these proposed actions. We are the record claim owner of 25 mining claims at East Butte, 28 claims at Middle Butte, and 30 claims at West Butte. We have interests in approximately as many other claims. So far as we know, the record owners of these claims were not notified. In addition we are the record lessee of extensive privately and state-owned land in all three areas. We never received official notice from BLM of the proposed plan. We heard about the draft EIS only belatedly and then by word of mouth. We then had to initiate our own inquiry with BLM to obtain a copy of the draft.

14 We would also call attention to the recent U.S. Supreme Court decision on zoning. If the BLM choses any alternative other than Alternative "A" (no action), such action will restrict the property rights of mineral owners and claimants and other landowners. It may therefore constitute a "taking" for which owners and/or their lessees may entitled to just compensation.

64

No. 12

BLM has answered your specific questions in the following responses.

No. 13

Public participation is an integral part in the Bureau planning system. The BLM has attempted to involve interested parties throughout the planning process. BLM published Federal Register Notices and news releases and held meetings to encourage public participation. Table 5-1 of this document contains a detailed list of activities BLM undertook to ensure the broadest possible public participation.

No. 14

The criteria for evaluating mineral exploration or development proposals has been, and will remain, that of mitigating through the use of stipulations, activities that cause unnecessary and undue degradation. The 1872 Mining Law never authorized activities that cause unnecessary and undue degradation so the property rights of mineral owners/claimants will not be further restricted.

Under Alternative C, (which was not selected) the Sweet Grass Hills would be withdrawn from mineral entry. If validity exams were then conducted on preexisting claims they would constitute due process. A mining claimant has not established a property right if a validity exam reveals the claim is not supported by a mineral discovery under the mining law.

7c

ERNEST K. LEHMANN & ASSOCIATES OF MONTANA, INC.
GEOLOGISTS

The Background Materials Furnished are Inadequate:

15 With respect to minerals in the Sweet Grass Hills, we believe the draft EIS is inadequate. We believe that the history of recent mineral-exploration activities, the area's potential for hosting economic mineral deposits, the economic potential of mineral development, and the geologic information presented are incomplete and partially incorrect.

Geologic Data

The three main areas of the Sweet Grass Hills - East, Middle, and West Butte - as well as outliers such as Grassy Butte, are one of a number of alkaline and calc-alkaline volcanic centers of Tertiary age in north-central Montana, in the eastern Rockies, and in other areas in the stable interior of North America. Nearby examples in Montana include the Little Rockies, the Judiths, the Moccasins, the Bearpaws, and the Highwoods. Where these volcanic centers intrude the sedimentary rocks of the High Plains, they are complex emplacements of near-surface and extrusive volcanic rocks. The intrusion has domed up the surrounding sediments. The sediments typically range in age from Paleozoic to Tertiary. The core complexes consist of syenites, trachytes, latites, shonkonites, and related silica-deficient igneous rock suites. The intrusives may be altered, extensively brecciated, and locally mineralized. The intruded sediments include limestones, shales, and sandstones that are metamorphosed along the contacts with the igneous rocks.

One of the reasons for our choice in 1983 of the Sweet Grass Hills as an exploration site was that it was poorly mapped area. This fact and its regional similarities with important

65

No. 15

The geologic and economic information and mineral potential of the Sweet Grass Hills have been updated following the receipt of data from various mineral concerns since the draft RMP/EIS was published. For more information please refer to errata entries for page 64, column 1; paragraph 1 thru 8; page 65 column 1; and page 79, column 2.

mineralized areas in Montana and elsewhere (as discussed below) led us to believe that the area holds significant promise of economically important mineral discoveries.

Mineral Potential:

Historically, mineral exploration in the Sweet Grass Hills from about the turn of the century onwards focused primarily on the occurrences of fluorspar as contact metamorphic deposits at East Butte, nonferrous metal deposits in igneous-sedimentary contact zones in the same area, placer gold occurrences at Middle Butte, and a small lead-silver occurrence on West Butte. The Draft EIS fails to mention the last two types of occurrences, even though active placer mining has been going on at Middle Butte for a number of years and patented mining claims exist on West Butte.

99 16

There is now active mineral exploration at East, Middle, and West Buttes, as well as at Grassy Butte. This is because the Sweet Grass Hills have strong similarities in rock type and style of mineralization to other important gold-producing and prospective gold-producing areas.

For example, there are strong geologic similarities and affinities of this area with the gold deposits mined by the Zortman-Landusky operations of Pegasus Gold Company, the largest gold producers in Montana, in the Little Rockies. The Sweet Grass Hills are also geologically similar to other major gold-producing areas in the world such as the famous Cripple Creek district of Colorado and the newly discovered deposits slated for development in New Guinea. The economic potential of the area is

No. 16

Please refer to response No. 15.

ERNEST K. LEHMANN & ASSOCIATES OF MONTANA, INC.
GEOLOGISTS

not only for medium- to large-scale open-pit operations but also for higher grade underground deposits.

The geologic conclusion that there is potential for gold in commercial quantities in the Sweet Grass Hills is reinforced by the discovery of possibly ore-grade mineralization of unknown extent in drillholes at Grassy Butte and by anomalous concentrations of gold and related pathfinder elements in rocks and soils at East, West, and Middle Buttes.

The Economic Benefits of Mineral Exploration and Development:

67 17

The data presented are incomplete in that no presentation is made of the amount of exploration that has been done in the Sweet Grass Hills in recent years and the direct and indirect present and future economic benefits to the area from "hard" mineral exploration and development.

We estimate that since we began our own exploration program in the area in 1983, over $500,000 has been spent by us and others on mineral exploration in the Sweet Grass Hills. This work has included geologic and geochemical mapping and sampling, geophysical, and topographical surveys and related work. Drilling has not yet been undertaken except at Grassy Butte. Extensive drilling will be required to test the identified and to-be-identified targets. A large part of the exploration expenditures remains in the local community in the form of payments to landowners for rentals and advance royalties and for the purchase of goods and services such as meals, lodging, road construction, labor, gasoline, repairs, etc. Before any discovery can be brought to the development stage, it is reasonable to estimate that an additional $1 to $5 million will be expended

No. 17

Please refer to response No. 15.

to explore and delineate a single orebody. In fact, the amount may be several times this, since the area holds potential for several orebodies. A large part of these expenditures will continue to be for local goods and services. These exploration expenditures alone will have a major positive impact on the region's communities such as Chester and Shelby.

If development of even a modest-size open-pit mine occurs, such an operation could be expected to employ directly 35 to 50 persons for periods of ten to twenty years as equipment operators, mechanics, technicians, and administrative staff. If labor is available in the area, most of these people will be hired locally. Such employment would result in a payroll in the range of $800,000 to $1.5 million annually in the area. A large open-pit operation or medium-size underground mine would employ comparably more people.

It is generally projected by economic planners that one direct job in the mineral industry produces about three to four indirect jobs in the local area. These indirect jobs provide the services required by the operation and its employees. Thus it is clear that if a viable mineral discovery is made in the Sweet Grass Hills, it will have a strong positive effect on the economies of the communities involved. It would diversify the employment base, decrease unemployment problems, and markedly increase the state and local tax base.

7g

ERNEST K. LEHMANN & ASSOCIATES OF MONTANA, INC.
GEOLOGISTS

The Data Presented by BLM Do Not Substantiate the Proposed Preferred Alternative

18 For the reasons cited below, we believe that the choice of alternative "D" is not substantiated. Therefore, we believe that the only acceptable alternative proposed by the BLM is alternative "A", the "non-action" alternative. We believe that alternatives "C" and "D" propose unnecessary restrictions, impose unnecessary regulation and are not warranted.

Our reasons are as follows:

19 a. Environmental concerns regarding mineral projects must be addressed on a site-specific and project-specific basis.

Exploration is generally a broad-ranging activity that has little lasting or major environmental impact and should not be subject to regulation beyond those already imposed by the BLM and the State of Montana. The environmental impacts of mineral exploration are limited in time and extent. No area within the Sweet Grass Hills need be withheld from exploration since the activity is subject to adequate regulation by the BLM and the State of Montana to insure no lasting detrimental environmental effects.

Until there is a definitive proposal for a mineral development, it is impossible to judge the environmental impact which such a development will have. For example, the impact of a large open-pit operation is much different than that of a small one; the impact of an underground mine will be quite different than that of an open pit. Even a relatively large open-pit mine would probably occupy only a small area in comparison to the area under

69

No. 18

BLM has answered your specific questions in the following responses.

No. 19

We agree. The most meaningful analysis of project impacts and application of mitigative measures results from on-site inspections. However, resources that need protection from development can be identified prior to a development proposal. Mitigative measures would be applied when needed to prevent unnecessary and undue degradation of resources. For more information please refer to the Sweet Grass Hills Implementation section of Alternative D in Chapter 2 of this document.

ERNEST K. LEHMANN & ASSOCIATES OF MONTANA, INC.
GEOLOGISTS

consideration for restriction under Alternatives "C" and "D". General restrictions cannot rationally be imposed in advance of the completion of the delineation of a mineral deposit and submission of a definitive development proposal; only then can environmental impacts be properly assessed.

20

b. The current regulatory process is adequate

In addition to the five-acre rule of the BLM regarding BLM surface, all physical exploration in Montana is currently subject to state permitting and bonding requirements. These state rules require reclamation whether the work occurs on private or public lands. To date, the state has adequately and fairly carried out its responsibilities.

Issues of air and water quality and many other environmental issues do not generally arise during exploration. The state's mine-permitting process for development, operation, and reclamation deals extensively with environmentally related issues such as air and water quality and biologic, cultural, and other resources. It does this on a site-specific and project-specific basis.

c. The proposed adoption of the raptor guidelines is unwarranted

21

As the report itself points out, there are no endangered raptor species in the Sweet Grass Hills area. Setting up buffer zones around possible future nesting sites is unwarranted and unnecessary because the BLM has not identified any funded program for the introduction of these species in the area.

No. 20

The Endangered Species Act of 1973, requires an assessment of all BLM projects, regardless of the presence or absence of threatened and endangered species. The Rocky Mountain Front Raptor Guidelines would be used to develop site specific mitigation for a specific project. The National Environmental Protection Act and the Endangered Species Act require BLM to assess an entire project (exploration, development, termination) before an action can be approved. The Peregrine Falcon Interagency Recovery Plan is mandated by the Endangered Species Act. BLM cannot act independent of it and BLM must consider the prospects for establishing threatened and endangered species in suitable or historic habitats.

No. 21

Peregrine falcons and bald eagles occur as migrants throughout the RMP area.

The management standards, and particularly the Raptor Guidelines in Appendix 2.2, will not be imposed until analysis reveals they are needed to prevent unnecessary and undue degradation of threatened and endangered and sensitive raptor resources.

ERNEST K. LEHMANN & ASSOCIATES OF MONTANA, INC.
GEOLOGISTS

We further note that peregrine falcons are being successfully introduced into the middle of major metropolitan areas (e.g. on top of the Multifoods Tower in downtown Minneapolis), suggesting that no extensive buffers are needed to shield this species from human activities. Eagle nests have been noted close to many areas of intensive human usage, for example within 100 yards of the major highway entrance to the Cape Canaveral rocket launch area and in areas of diverse and intense human activity such as the St. Croix River valley of Minnesota and Wisconsin.

22

We conclude the effect of exploration on raptors can be expected to be nil and that the effect of mineral development on raptors can only be assessed on a site- and project-specific basis.

71

d. <u>The imposition of additional rules cannot be justified on the basis of threatened or endangered species</u>.

The report (p.50) admits that there are no plants in the Sweet Grass Hills that are on the threatened or endangered species list.

23

A close reading of page 51 of the draft indicates that, despite the introductory sentence to the discussion of endangered or threatened animal species, none of these exist in the Sweet Grass Hills per se.

If such species are identified during the mine-permitting process, the problems can be dealt with on a site-specific basis at that time.

No. 22

Some birds become conditioned to non-typical nesting sites such as the Multifoods Tower. This is an exception, not the rule. It is similar to introducing birds in the wild at "hacking sites." Hopefully, birds will return to these hack sites annually to establish new occupation areas in the wild.

No. 23

No plants listed as endangered or threatened under the Endangered Species Act are known to occur within the planning area. However, potential habitat exists for *Antennaria aromatica* and *Rorippa calycina* which are both potential candidates for listing as threatened or endangered species.

Potential habitat also exists for these Montana species of special concern: *Carex crawei, Carex sychnocephala, Hedysarum alpinum, Muhlenbergia andina, Plagiobothrys leptocladus, Psilicarphus brevissimus var. brevissimus, Ranunculus cardiophyllus and Triglochin concinnum var. debile.*

Please refer to response No. 21.

ERNEST K. LEHMANN & ASSOCIATES OF MONTANA, INC.
GEOLOGISTS

e. The imposition of additional regulation cannot be justified on the basis of cultural resources.

24 In three years of geologic mapping, our field personnel have not identified or noted a single archaeological site in the Sweet Grass Hills. The draft EIS fails to list any specific site in the Sweet Grass Hills in the discussion of significant cultural sites on page 56 of the draft.

The effect of mining on cultural resources can only be judged on a site-specific basis, as will be required under current state permitting procedures, at the time of application for a mining permit.

72

f. The effect of exploration on hunting and other recreational uses will be nil and cannot yet be judged for a mining operation.

25 Exploration should not have any significant or lasting effect on the elk or deer herds.

The effect of a mining operation will depend on size, location, and design and cannot be judged at this time.

No. 24

Overview information indicates some parts of the Sweet Grass Hills have high potential for significant cultural resources and several sites have been identified by BLM archaeologists. Project specific inventories have and will continue to be required for projects on public lands.

BLM is required to consider impacts to traditional Native American values from the actions it conducts or permits. The Sweet Grass Hills are known in historical and modern times to have been used by Native Americans pursuing traditional cultural activities.

No. 25

An environmental review is conducted when a Notice or Plan of Operation for mining or exploration is submitted. This review may identify the mitigation necessary to prevent unnecessary and undue degradation of resources. However, exploration disturbance (roads) and development activities can result in a direct loss of wildlife habitat and displaced wildlife. The degree of significance would depend on the magnitude of the operations.

ERNEST K. LEHMANN & ASSOCIATES OF MONTANA, INC.
GEOLOGISTS

26 g. The effect of exploration on visual resources can only be determined on the basis of specific mine plans.

The area of the Sweet Grass Hills does not fall within the criteria for wilderness designation and has not been so designated.

Exploration will not cause any lasting degradation of visual resources.

Mining's visual effects can be partially mitigated by sensitive design, good siting, and good engineering. Proper reclamation will also mitigate effects. These will be considered in the state's permitting process.

27 h. The imposition of the propose new rules will not eliminate conflicts with claimed rights of Native Americans.

Additional restrictions will not serve to extinguish the claims of Native Americans and therefore will not serve to facilitate exploration or mineral development or to prevent court action by Native Americans to assert their claimed rights.

Conclusion:

The Draft EIS is based on incomplete information as far as the geology and mineral potential of the Sweet Grass Hills are concerned. The Draft EIS does not adequately consider the possible economic benefits of mineral exploration and development.

No. 26

Mineral exploration and development would have an impact on visual resources in the Sweet Grass Hills. The cumulative impacts must be considered, if exploration indicates development is economically feasible. These impacts may be mitigated as each specific mine Plan is evaluated for its impact on the existing landscape. The impacts and reclamation needs would be considered during the BLM's review and the state's permitting process, regardless of the area's status for wilderness.

No. 27

While Area of Critical Environmental Concern designation would not eliminate conflicts between Native American religious rights and mining activity, it would allow BLM more time to attempt to resolve the conflicts before mineral development begins.

71

The environmental impacts of mineral exploration are temporary and minor.

The positive and negative environmental impacts of mineral development cannot be judged except on a site- and project-specific basis. With proper engineering, mineral development can be designed so as to mitigate unnecessary environmental degradation and at the same time insure that the benefits to the state and the community in terms of jobs, taxes and income will outweigh potential costs.

There are no endangered or threatened species in the area.

The imposition of the raptor guidelines is unwarranted based on the absence of nests in the area and on actual experience.

74

The impacts on recreational activities, especially hunting, are negligible during exploration and can only be evaluated on a site-specific basis for mining.

The conflicts over possible Native American rights would not be mitigated by the proposed choice of Alternative "D". The current state regulations and BLM regulations are adequate.

Therefore, Alternative "A", the "no-action" alternative should be adopted.

Very truly yours,

Ernest K. Lehmann, CPG
President

EKL/kjk

8706073
EE1001

8

Lloyd H. Oswood

Chester, Montana 59522

Wayne Zinne, District Mananger
Lewistown District Airport Road
Lewistown, MT 59457

Re: West HiLine EIS

Dear Mr. Zinne:

I am a landowner in the Sweet Grass Hills of Montana. I oppose opening up the 520 acre tract to mining. I prefer Alternative C which I believe would best protect the resources and wildlife of the Sweet Grass Hills.

Sincerely,

Lloyd H. Oswood

75

9

Montana State Senate

SENATOR BOB WILLIAMS
SENATE DISTRICT 15
HOME ADDRESS:
BOX 338
HOBSON, MONTANA 59452
PHONE: (406) 423-5418

The Big Sky Country

COMMITTEES:
PUBLIC HEALTH, WELFARE & SAFETY
BUSINESS & INDUSTRY
HIGHWAYS & TRANSPORTATION

Hobson, Montana
August 4, 1987

Wayne Zinne, District Manager
Lewistown District of BLM
Airport Rd
Lewistown, Montana 59457

Dear Mr. Zinne;

I appreciate the efforts of the BLM in compiling the West Hiline Resource Management plan draft and bringing it to the general public. Due to a previous engagement I was not able to attend your Lewistown hearing but, my wife, Kati, attended.

76

After briefly reviewing your draft on the management proposal and discussing the proceedings of the meeting with Kati, I would think it prudent to lend my support to Alternative D with the alternatives suggested by Dick Knox and supported by theMissouri Breaks Multiple Use Assn. Many of these people have lived in the area all of their lives and have a vested interest in the preservation of the area.

28

The management proposal is for a ten year period. I understand that a staff person said that the fencing of areas to rehabilitate the water dependent habitat (riparian areas) would not be permanent---those two statements in the Missouri Breaks, to me, are contradictory. Without normal use, fenced riparian areas would cultivate weak specimens. The members of the Missouri Breaks Multiple Use Assn. are anxious to see these areas flurish and their practical judgment should be utilized.

Thank you for your consideration to the exceptions for Alternative D.

Sincerely,

Bob

Senator Bob Williams

BW/kw

No. 28

Riparian habitat management objectives include obtaining 90% streambank cover within 4-10 years after plans are implemented. Management practices may include but are not limited to riparian pastures, specific grazing methods or exclosures. All existing and future riparian exclosures would be maintained and monitored until data shows that the exclosures are no longer necessary.

A more comprehensive digest of this subject is presented in the Vegetation Management portion of Chapter 2 in this document.

Southern Rocky Mountain District
Exploration United States

Marathon Oil Company

P.O. Box 120
Casper, Wyoming 82602
Telephone 307/235-2511

August 10, 1987

Mr. Wayne Zinne
District Manager
Lewistown District Office
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Dear Sir:

Re: Comments on the Draft Resource Management Plan

29 There seem to be some discrepancies regarding stipulations. The BLM manages 626,098 surface acres and 1,329,014 subsurface acres. The tables in the mineral sections for the Environmental Consequences Chapter total over a million acres of stipulated land. The BLM has no

30 legal authority to close private land to leasing which may be within the VMNWSR or WSA's. Additionally, standard and seasonal stipulations cannot be enforced on private surface with federal minerals.

Regarding the no lease decision for WSA's, it seems premature, prior to Congressional action, to withdraw lands from leasing. There is no evidence that leasing will degrade the wilderness characteristics, nor is there any benefit to the process by this withdrawal. The statement,"Appropriate protection can only be ensured by closing the lands to leasing," is unwarrented and should be amended.

31 A question arises on the Tables presenting "Constraints on Oil and Gas Exploration and Development". Do the Low Development potential acres make up for any difference in acreage figures?

32 In regard to the emphasis areas, the BLM has utilized overrestrictive measures including inflammatory wording to achieve a protection goal. It is not warrented to classify an area in ACEC and then provide a "buffer zone" around the ACEC. Will the next planning cycle provide a "buffer zone" around the "buffer zone"? The BLM has adequate statutory to protect and inventory threatened and endangered species as well as cultural and archaeological resources.

No. 29

The BLM manages 626,098 acres of surface estate and 1,328,014 of subsurface estate in the planning area. The figure 1,121,467 from Tables 4.1, 4.2, 4.3 and 4.4 of the draft is different from the total subsurface acreage because oil and gas ownership has not been retained on all of the subsurface mineral estate. Over half of these lands (58%) are leased under the standard terms and conditions attached to all leases.

No. 30

The BLM cannot issue leases, with or without stipulations, on federal mineral lands within the boundaries of the Upper Missouri National Wild and Scenic River or wilderness study areas. These lands are considered closed to oil and gas leasing as a result of legislation dealing with these respective land categories. The BLM is not proposing, nor does it have the authority to propose, the curtailment of private mineral development in the Upper Missouri National Wild and Scenic River or wilderness study areas. Please refer to the minerals portion of Management Common To All Alternatives discussion in Chapter 2 of this documen t.

The BLM does not have the legal authority to regulate how a surface owner manages his or her property. In all cases, the stipulations prescribed for federal mineral development in split estate situations apply only to the development of the federal minerals. These stipulations do not dictate surface management.

The mitigation measures present no restrictions on surface activities conducted for purposes other than those mineral development activities which are permitted, licensed, or otherwise approved by the Bureau of Land Management. One of the purposes of proposing such lease stipulations is to preserve the surface resources so that the surface owner can manage them as he or she chooses.

The BLM has a statutory responsibility under the National Environmental Policy Act, when considering issuing a mineral lease to assess the potential environmental impacts of the federal action. It also has the statutory authority under the Mineral Leasing Act, 1920, and the Federal Land Policy and Management Act, 1976, to take reasonable measures to avoid or minimize adverse environmental impacts that may result from federally authorized mineral leasing activities. This authority exists regardless of whether the surface is federally owned or not.

The Mineral Leasing Act, 1920, and the FLPMA, 1976, are not the only statutes that establish such authority. Other statutes that apply include the Clean Water Act, the Clean Air Act, the National Historic Preservation Act, the Endangered Species Act, 1973, the Federal Coal Leasing Amendments Act, 1976, and the Surface Mining Control and Reclamation Act, 1977. Please refer to the minerals portions of Chapter 2 for more information.

No. 31

There are only two categories of oil and gas development potential within the HiLine area "moderate" and "high". The tables in Chapter 4 of the draft have been revised and are shown in the appropriate errata locations in this document. The acreage does not equal the total subsurface acreage because oil and gas ownership has not always been retained.

33 Turning to the Appendices, there are no standard or seasonal stipulations outlined. It would be helpful to list the stipulations to be used.

The inflexibility of including specifics in the plan under Appendix 2.2, may cause problems in the future. The exact seed mix described under this Appendix could not possibly work for over half a million acres of BLM administered surface. Some flexibility must be incorporated or when variances do occur, a plan amendment will be necessary.

Thank you for the opportunity to comment on this plan and we hope you incorporate these suggestions.

Sincerely,

Bradley G. Penn

Bradley G. Penn
Land/Environmental Coordinator

BGP/en

cc: M. M. Wade
J. V. Polisini
R. K. Bitter

No. 32

Management Zones ("Buffer Zones") around Areas of Critical Environmental Concern have been deleted from consideration in this RMP. However, the BLM is mandated to take reasonable measures to avoid or minimize adverse environmental impacts that may result from federally authorized mineral leasing activities. This authority exists regardless of whether the surface is federally owned or not. The Rocky Mountain Front Raptor Guidelines will be applied to federal mineral development in the raptor habitat areas, regardless of surface ownership (see Appendix 2.2).

No. 33

Some standard or seasonal stipulations were inadvertently left out of the draft document. Stipulations related to oil and gas activity have been revised and are now included in Appendix 2.2.

11a

August 24, 1987
Whitlash, Montana

Wayne Zinne
District Manager
Lewistown District Office
Bureau of Land Management
Airport Road
Lewistown, Montana
59457

Dear Sir:

Please find in the following paragraphs comments on the RMP/EIS West HiLine Draft. I attended three of your public meetings, Great Falls, July 14, Shelby, July 15, and Chester, July 16. The following are comments on different subjects of the contents of the document pertaining to the Sweet Grass Hills where I own a ranch with my father.

As to the off road vehicle management in the Sweet Grass Hills, my choice of alternatives would be alternative C. Because of the problem of weed control on public and private adjoining land being spread by vehicles. The danger of fire to public and private adjoining land that can be caused by ORV's. Also the soil erosion caused by ORV that would be bad for the water shed importance of the public land and the whole Sweet Grass Hills.

As to the Right A Way locations management of the Sweet Grass Hills. I would favor the alternative C which would exclude West and Middle Butte from [redacted] communication sites, as it would mean more roads which would mean more damage to water sheds, more weed control problems, and more fire hazards. Any road that has to be made is a permanent scar that the land will always have. As to the communication site on East Butte that is already there, I know from personal experience that it has to be controlled so as not to get any bigger in order for the adjoining private land to not suffer further damage on land, roads, etc.

As to the mineral exploration of the Sweet Grass Hills, from what I have seen in the last 40 years, is that 2 hours of cat tractor making roads can cause more permanent damage to the land by hurting water shed, cause weed problems to both public and private land, and all to often or usually for no real good. Mining can and has already destroyed a lot of historical beauty of the Sweet Grass Hills. Mining has a negative effect on water quality and quanity which is vital for the public and private land as well as for the people making a living on those lands. Mining on public land also pushes the wild life off public land and on to adjoining private land which puts a hardship on landowners by causing more damage to vegetation on private land. By wildlife being pushed off public land by mining the public has less chance to enjoy them. I know that the BLM has to manage the mining on public land inside the mining law of 1872, but I would like to see the BLM manage it and the surrounding federal subsurface minerals in the most careful and controled way that they can. And withdrawal of most of the public land in Sweet Grass Hills from mineral exploration if they can.

79

11b

As to the timber of the public land in the Sweet Grass Hills, it is of vital importance to both the public land and the adjoining private land as a water shed that supplies the creek and springs in the Hills. It should be managed as not to be commercialized as there isn't really that much timber there in any area on the Buttes.

As to the grazing on the public land in the Sweet Grass Hills, I know from being a third generation rancher adjoining the public land in East and Middle Buttes, that grazing on the BLM land is something that doesn't hurt the land over night permanetly, and that the BLM management of the grazing has plenty of time to stop any damage being done. I have seen very little if any damage to BLM grazing land over the years in the Sweet Grass Hills. The BLM land is usually the steep and highest land that is hard to get stock to graze anyway. I thank the BLM should manage the grazing as they have in the past as in alternative A.

Thank you,

Douglas W. Demarest

Douglas W. Demarest
P.O. Box 7
Whitlash
Montana
59545
406-432-5185

80

12

8-25-87

Sirs,

I am strongly in favor of developing a trail head and trail system on BLM Land in the East Butte area of the Sweet Grass Hills.

There is a dearth of good hiking areas in the Havre Hi-Line area. East Butte would help to remedy this. BLM already has the Land so the trail head and trail is a very logical development.

Thank You

John Ellens
937 Second St.
Havre, Montana 59501

81

(Typed exactly as received for reproduction in the Final RMP/EIS)

United States Department of the Interior
BUREAU OF RECLAMATION
Missouri Basin Region
P.O. Box 36900
Billings, Montana 59107-6900

IN REPLY
REFER TO: MB-152

AUG 26 1987

Memorandum

To: District Manager, Lewistown District Office, Bureau of Land Management, Lewistown, Montana

From: Regional Environmental Affairs Officer, Billings, Montana

Subject: Review of Draft Resource Management Plan/Environmental Impact Statement for the West HiLine Planning Area of the Lewistown District, Montana (DES-87/16)

We have reviewed the subject document and offer the following comments:

34

1. Page 21 - The proposal to revoke the withdrawal on the remaining 529.67 acres of the Bureau of Reclamation riprap source is satisfactory, provided the 40 acres adjacent to the existing quarry remain in withdrawn status as is stated in Alternative A (No Action).

2. Page 29 - We would prefer that the proposal referenced in No. 1 (above) be elaborated more fully in Alternative D (Preferred) so as to eliminate any possible misunderstanding regarding your intent to permit the 40 adjacent acres to remain in withdrawn status.

Thank you for the opportunity to comment on this document. Should you have any questions about our comments, please contact Mike Erwin of my staff at (406) 657-6421.

Mike Erwin

cc: Commissioner, Attention: 150

No. 34

The BLM has reviewed the Bureau of Reclamation withdrawal on East Butte (569.67 acres), and is recommending that 40 acres of the withdrawal be retained. The remaining 529.67 acres would be returned to BLM administration and managed under Area of Critical Environmental Concern guidance.

Please refer to the Sweet Grass Hills Implementation portion of the Alternative D discussion in Chapter 2 of this document for further information.

14a

Medicine River Canoe Club

Great Falls, Montana

August 24, 1987

Wayne Zinne, District Manager
Lewistown District, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Zinne,

SUBJECT: WEST HILINE RESOURCE MANAGEMENT PLAN

We wish to comment on your draft management plan and have deep felt concerns about some of the alternatives. We are commenting only on the areas that are of greatest concern to our organization, mainly those that will affect the Missouri River corridor.

LAND TENURE:

We are in favor of blocking up lands where it is advantageous to the recreationist or important in protecting the resource. We also believe that, even if isolated, riparian areas should be retained. (Alternative C or D)

OFF-ROAD VEHICLE MANAGEMENT:

We would definitely like to see significant restrictions on ORV use in important wildlife areas and along the river corridor; also on any riparian areas on tributaries within the management area. Not only are we concerned about the effects of erosion and the spread of noxious weeds but also the aesthetic degradation by noise pollution. The song of a meadow lark or the call of a wild goose drowned by the whine and roar of an ORV is an affront to the senses and indisputably intrudes upon the solitude sought by many river users.

UMNWSRM:

Visitor Services:

We favor Alternative D in regard to implementation of LAC and operation of visitor centers at Fort Benton and Judith Landing. On use of islands we can see the need for closure during the periods indicated to protect wildlife reproduction but they should be open to public use the rest of the year.

We urge you to adopt Alternative C in regard to interpretive activities. We are opposed to signs and displays along the river corridor. This, like ORV use, is an example of aesthetic degradation and is contrary to our concept of what the river corridor should be.

83

We suggest that a simplified and condensed version of the River History Digest be available to the public at no or minimal cost and that it concisely explain key geological and historical sites.

The current River History Digest is and excellent compilation and we commend its authors. We would like to see this work expanded, possibly to include more of the Canfield diary on Camp Cooke and similar inclusions. We would also like to see this work expanded to include some geological information. We think many river users are interested in this aspect of the river in addition to the fascinating historical comments.

Just as now, the information in the digest should continue to be keyed to river mile locations. This book could adequately inform people without need of landbased signs and displays. We are opposed to any use of such devices as, again, they only contribute to aesthetic degradation.

The digest should continue to be available on a loan basis but you might want to make it available for purchase. There are individuals who would be interested in owning this reference.

Facility Management:

As use of the corridor increases we can see the need for more undeveloped sites and possible upgrading to semi-developed sites. We are hesitant to endorse fully developed sites even in the recreational sections since they represent an intrusion of civilization that we feel is inconsistent with the character of the river that should be preserved. We endorse Alternative A.

Concession Management:

It is in this area that your proposals most disturb us. We are unalterably opposed to any major concessions in any area of the river corridor. The concept of marinas, RV parks and similar concessions is totally inconsistent with the concept of wild and scenic rivers. Even though these concessions would be restricted to the recreational areas, their presence in these areas would have an impact on adjoining areas and would certainly disrupt and devalue the total experience sought by many as they traverse the river corridor. We concur with Leroy Schelly's statement at the Great Falls hearing on July 14, 1987, "Floaters want to see the country like Lewis and Clark saw it."

It is inconceivable to us that this new frontier for development should even be considered. The thought of raping one of our few remaining natural sections of a major, nationally known river for the sake of a few bucks is appalling. We strongly support Alternative A.

This river corridor is a magnificent heritage that should be preserved as nearly as possible in its natural state. It gives man an opportunity to step back in time, to reflect, to enjoy and to appreciate the moments of history described in the River History Digest. Recreational developments as proposed here would significantly alter the character of this river. If members of the recreating public wish a waterway with all the amenities of modern civilization let them chose one of the many already commercialized areas. Let us preserve what this fine stretch of Missouri River has to offer and determinedly resist the lure of commercial bucks.

We have enclosed an article form the current issue of Canoe magazine (Oct. 1987) in which some well-known artists express some of their feelings and reactions to this river. They reflect our emotions and attitudes quite well. We are hoping that this article will help you to realize that it is not just a handful of people in our organization alone that hold the attitude we have expressed.

All opinions expressed in this letter also apply to management of the Marias River.

Sincerely,

James W. McDermand

James W. McDermand, Spokesman
Medicine River Canoe Club
3805 4th Ave. South
Great Falls, MT 59405

8/26/87

Dear Mr Zinn,

On the reverse side is a letter I sent to the Lewistown office in early July. Your office sent me a copy of the West HiLine Draft.

35 While I agree that plan D seems the best the issue of cattle grazing in the waterway is not clarified. My cursory reading of the Draft indicates that riparian habitat will not be enhanced by any of the proposals. Of my objections listed on the reverse side, the presence of farms and cattle in the UMNWSR is objectionable to and contradictory of an aesthetic and natural experience.

My best to you on your management plans and enactment.

Sincerely,

Larry Gaffin

7/8/87

Dear Sir/ms.,

I was fortunate to be able to spend 4 days on a canoe outing from Loma Ferry to Judith Landing. I appreciate and applaud the work it took to establish this and the larger section of the Upper Missouri as a National Wild and Scenic River.

There are, However, several parts of my experience during this float on which I'd like to comment. I make these comments knowing a future plan for this river section is in the works, but I am not aware of its contents.

The waterway is a grand but very fragile facade. Hikes up several of the breaks revealed farms and farm activities at the very edge of the waterway, thus reducing the feeling and aesthetic of being in another place and time. However, that facade was at the point of dissolution because of the constant sound and presence of spray planes and cattle in the breaks and at the very water's edge. Not only does ranching encroach the integrity of the waterway but the quality of cottonwood groves is diminished because of grazing. The Hole-in-the-Wall campground was not something many floaters would want to use and the Slaughter River Campground was in ill-repair and completely overrun by cattle. The latrines were, however, fairly clean and functional at both sites.

The last thing that marred an otherwise positive and memorable experience was the constant presence and sound of military aircraft. The natural experience of being on the river was marred by this constant pollution of noise.

36 Again, I applaud the waterway, sympathize with your efforts to maintain it, and I would be willing to make specific comments for future use plans if you are receiving comments. Is an outline copy of the plan available?

Would you please send the extra copy of this letter to the appropriate Montana agency in charge of the Hole-in-the-Wall and Slaughter River Campgrounds. Thank you

Sincerely,

Larry Gaffin
331 Dillon
Mankato, Mn. 56001

(Typed exactly as received for reproduction in the Final RMP/EIS)

No. 35

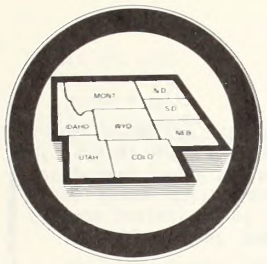
Riparian habitat was not an issue analyzed in this planning effort. However, a Coordinated Activity Plan will be prepared for the Upper Missouri National Wild and Scenic River which will address riparian habitat. Riparian vegetation is also discussed in the Management Common to All Alternatives section of Chapter 2. Please refer to that discussion for additional detail and information.

No. 36

The current river plan is scheduled for revision beginning in 1988, with completion anticipated for late 1989, pending finances. The tentative schedule allows public review of the draft activity plan (river plan) early in 1989. Your name will be added to the mailing list.

Your comments have been provided to the Montana Department of Fish, Wildlife and Parks, the agency which administers these campgrounds.

16a



1860 Lincoln Street, Suite 404 • Denver, Colorado 80295
303/860-0099

August 28, 1987

Mr. Wayne Zinne
District Manager
Bureau of Land Management
Airport Road
Lewistown, MT 59457-1300

Dear Mr. Zinne:

On behalf of the Rocky Mountain Oil and Gas Association (RMOGA), I appreciate the opportunity to provide you with our comments on the Draft Resource Management Plan and Draft Environmental Impact Statement for the West HiLine Resource Area in Montana. RMOGA is a trade association with hundreds of members who account for more than 90% of the oil and gas exploration, production and transportation activities in the Rocky Mountain West. Consequently, we have a vital interest in how the BLM plans to manage its lands in Montana. Our comments address several concerns we have regarding the proposed management of the Resource Area and the manner in which resource data is displayed.

87

We strongly disagree with the BLM's decision to withhold lands along the designated scenic and recreational segments of the Upper Missouri Wild and Scenic River from oil and gas leasing. The BLM refers in the planning document to a field solicitor's opinion in Appendix 2.1 as apparent justification for this decision. However, this opinion indicates that for nonwild segments of the river "Leasing under the mineral leasing laws can continue under the 1968 and 1976 Acts and can under such regulations as the Secretary of Interior may specify to effectuate the purposes of both Acts...It is noted that lands within wild segments will not be available for leasing." (emphasis added)

Upon reviewing the Wild and Scenic Rivers Act of 1968, it is obvious that Congress intended that oil and gas leasing be accommodated along nonwild segments of the river within the parameters established by the Secretaries of Interior or Agriculture. The Wild and Scenic Rivers Act of 1968, in Section 1280(a) states that "Federal lands which are part of the system and constitute the bed or bank or are situated within 1/4 mile of the bank of any river designated a wild river . . . are hereby withdrawn . . . from operation of the mineral leasing laws . . ." There is nothing in the law that states that the scenic and recreational segments of the designated river should not be leased with reasonable stipulations. This view is supported by the field solicitor's opinion which was quoted above.

37

No. 37

The BLM's interpretation of this quote from the Solicitor's Opinion (Appendix 2.1) is that new regulations which deal with the management priority given to recreation and preservation must be developed at the BLM Washington Office before leasing can continue in the scenic and recreational segments of the Upper Missouri National Wild and Scenic River. The closure will remain in effect until the Secretary of Interior directs BLM to take action on developing the needed regulations and lease terms that would lead to an active leasing program for non-wild segments.

The Mineral Resource Management portion of the Management Common to All Alternatives section in Chapter 2 has been revised to more clearly reflect the BLM's no-lease policy on the river corridor. Please refer to that section for additional discussion and information.

August 28, 1987

Mr. Wayne Zinne
District Manager
Bureau of Land Management

page 2

37 cont. We have detected no adequate justification for the BLM's decision not to issue oil and gas leases within these segments of the river. Therefore, we are opposed to the no-lease decision, and recommend that the BLM reconsider its decision and issue leases along the scenic and recreational segments of the river with reasonable stipulations.

38 Another item of major concern is the Table on Page 9 where BLM indicates that 41,385 acres of wild and scenic river corridor would be managed under a no-lease policy. When the river acreage is added to the acreage provided for the wilderness study areas, a total of 66,885 acres is reached. Yet, on Table 4.4, Page 107, it is indicated that 120,113 acres are being managed for no-lease. This represents a difference of 53,228 acres. A difference of over 53 thousand acres is quite significant. What does this additional no-lease acreage represent and what is the justification for this no-lease decision?

88 RMOGA is opposed to the designation as Areas of Critical Environmental Concer (ACECs) the Kevin Rim, Sweet Grass hills, and Cow Creek areas. As the planning document indicates, the entire planning area has moderate to high potential for oil and gas. In fact, the Kevin Rim area contains the oldest operating oil field in the State of Montana. We are concerned that such a designation would require more restrictive management in the future and that new production would be unduly restricted in an area which should be left open with a minimum of constraints.

The BLM has tried to justify these decisions by indicating that these areas require additional protection of threatened and endangered species, cultural resources, Native American religious sites, and designated National Historic Trails. However, there are numerous statutes which provide ample direction on how to mitigate adverse impacts to these resources as well as the authority to protect them. For example, the Endangered Species Act, the National Historic Preservation Act, the Antiquities Act, and the Archaeological Resources Protection Act, all provide comprehensive protection of the resources they address. In addition, the American Indian Religious Freedom Act mandates the same sort of protection for Indian religious sites. Consequently, we believe the BLM has at its disposal more than adequate authority to protect these values without adding the redundant layer of protection afforded by an ACEC designation.

39 On page 29 of the planning document, the BLM states it "would provide maximum protection of the significant and relevant resources in the Kevin Rim, Sweet Grass Hills, and Cow Creek areas . . . A management zone would be designated around the Kevin Rim and Sweet Grass Hills to ensure that development of federal minerals under private and state surface will be regulated, where authority exists, to follow the same guidelines on the ACEC".

No. 38

Please refer to response No. 32 for clarification.

No. 39

The text has been revised to clarify the application of stipulations to split estate. For more information please refer to the responses to comments 30 and 32.

16c

August 28, 1987

Mr. Wayne Zinne
District Manager
Bureau of Land Management

page 3

39 cont. We are gravely concerned that the BLM intends to establish buffer zones around the ACEC's and that it believes it has the authority to dictate special stipulations on split-estate lands. Buffer zones around ACEC's are totally unjustifiable and call into question the validity of the actual ACEC designation. With regard to split estate lands, while the BLM has the authority granted by nondiscretionary statutes to protect threatened and endangered species and cultural resources, it lacks any power to control privately-owned surface uses. The BLM's authority to affect National Environmental Policy Act (NEPA) mitigation extends only so far as it has legal control over the mitigation measures. According to Preservation Coalition v. Pierce, 667 F2d, B51 (9th Cir. 1985), a federal agency may assert control only as far as the law permits. The BLM is not able to dictate surface use to private owners nor to impose stipulations to protect privately owned surface.

68 This concept obviously represents federal zoning of private lands and should, therefore, be eliminated. We recommend that the BLM abandon the zoning concept and rely on the laws, regulations and guidelines which provide the BLM with direction on how to mitigate adverse impacts in statutorily protected areas. These tools should be utilized on a case-by-case, as-needed basis rather than on a zoning basis.

40 We are confused as to how much land in the planning area is public land. The BLM indicates that there are 626,098 acres of surface estate and 1,328,014 acres of subsurface mineral estate. We are further confused by Table 4.4 on Page 107 because it indicates that the BLM plans to apply stipulations to 1,121,467 acres of land. This total does not coincide with the figures for either surface or subsurface holdings. It is our understanding that the BLM has absolute authority only over public lands, where the surface and subsurface is federally administered together. In order to alleviate this confusion, we recommend that the BLM provide a specific discussion as to its intent in the form of a supplement to the subject plan and DEIS. It is important for the public to clearly understand exactly what type of management the BLM is proposing with regard to oil and gas activities and their relationship to the land ownership patterns within the West HiLine planning area.

41 We are also particularly concerned with the statement on Page 29 regarding the Kevin Rim area which states the BLM "would use the guidelines to develop stipulations for new development on existing oil and gas leases". The BLM does not have the authority to develop new stipulations for leases which have already been issued. The recently finalized Guidance for Resource Management Planning released by the BLM indicates that the BLM has absolutely no authority to require operators with previously valid existing rights to comply with new directives established in the new resource management plan. While the BLM may request operators to comply with new directives, it does not have the authority to require such changes after a lease has already been issued. Consequently,

No. 40

Table 4.4 has been revised. Of the 1,121,467 acres identified as moderate or high oil and gas development potential, 359,129 acres are constrained and 110,638 are closed to leasing.

No. 41

This language has been revised to read: BLM would work with operators to apply necessary guidelines to any new activity on existing leases which threaten nesting/rearing of state or federal sensitive raptors. These guidelines would be issued as special stipulations to all new oil/gas leases in the area. Please refer to the Kevin Rim and Sweet Grass Hills discussions in Chapter 2.

16d

August 28, 1987

Mr. Wayne Zinne
District Manager
Bureau of Land Management

page 4

this provision in the West HiLine RMP is illegal, and we urge the BLM to remove this directive from the final RMP.

In conclusion, while we support the use of moderate and minor lease restrictions on areas available for lease, we cannot support the Preferred Alternative because it proposes to withhold lands from oil and gas leasing along the scenic and recreational segments of the Upper Missouri Wild and Scenic River. Furthermore, we do not support the buffer or management zone concept for either federal or private lands. The BLM has been granted the authority to protect certain resources by law; therefore, there is no need to set an unnecessary precedent by instituting management zones around the proposed ACEC's. This same argument applies to the BLM's proposed ACEC's. There is no need for an ACEC designation in areas which are statutorily protected by law. Such a designation could cause the BLM to preclude important oil and gas activities in the future, and especially given the fact that one of these areas is a known oil and gas producing area, we are opposed to any such prohibitions.

Thank you for your consideration of our comments. Should you wish to discuss any of them in further detail, please do not hestitate to contact me.

90

Sincerely,

Alice Frell Benitez
Public Lands Director

AFB:cw

United States Department of the Interior
NATIONAL PARK SERVICE
ROCKY MOUNTAIN REGIONAL OFFICE
12795 W. Alameda Parkway
P.O. Box 25287
Denver, Colorado 80225-0287

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

L7619 (RMR-PP)

AUG 26 1987

Memorandum

To: Wayne Zinne, District Manager, Lewistown District Office, Bureau of Land Management, Lewistown, Montana

From: Associate Regional Director, Planning and Resource Preservation, Rocky Mountain Region

Subject: Comments on the draft Environmental Impact Statement/Resource Management Plan, West HiLine Planning Area (BLM) (DES 87/16)

The subject document presents a thorough analysis of the options available to Bureau of Land Management managers in the Lewistown, Montana, District/West HiLine Planning Area. The preferred alternative presents a balanced program of land disposal and exchange, recreational use, provision for preservation of key areas, and other appropriate resource management activities. Especially noteworthy are the well-thought-out plans for the Upper Missouri Wild and Scenic River.

It is not often that we have the opportunity to review, from any agency, such a well-written, concise environmental statement. It is further enhanced by the clean, uncluttered graphics and the outstanding line drawings.

We look forward to receipt of the final Environmental Impact Statement/ Resource Management Plan for the West HiLine Planning Area.

Richard A. Strait

18a

Jeff Langen
601 North Third
Missoula, Mont 59802

August 27, 1987

Wayne Zinne
District Manager
Lewistown District, BLM
Airport Road
Lewistown, Mont. 59457

Dear Mr. Zinne:

The following are my comments on the draft West MiLine Resource Management Plan. I intend to confine my remarks to the Missouri River portion of the draft. Thank you for the opportunity to participate in this planning process.

I was born and raised in eastern Montana and I have floated the Missouri River regularly since I was seven. I've seen many changes on the river over the years and I have watched the BLM's management of the river with interest. I bring this perspective to your attention for two reasons; first, because I feel well qualified to comment on the plan because of this familiarity, and second, because I understand that while you exercise a great deal of managerial control over the Missouri, you and key members of your staff have yet to ever float the river.

With this in mind allow me to quickly summarize the several significant flaws I have identified in the draft RMP.

The single biggest issue facing Missouri River managers is the

92

propogation of Cottonwood trees. If you examine Cottonwood ecology you will find the UMWSR is facing the dramatic loss of these trees. Experts such as Dr. Mark Behan, a botonist with the University of Montana have identified this issue in professional papers. Unfortunately, the closest your RMP comes to addressing this issue is to relegate the broader issue of riparian management to later, more obscure planning tools. I understand from friends in the BLM state office that the decision not to include this issue in the RMP was made by your Assistant District Manager. This is certainly indicative of the fundimental errors managers will make when they are unfamiliar with the resource they profess to manage.

While on the general topic of riparian management allow me to point out some of the problems with what the RMP does say concerning this topic. First, the issue is so fragmented that I had to read the document several times before finally piecing together some notion of how you plan to address riparian management. Second, if temporial exclosures of cattle are planned under all alternatives why is it treated as a benefit for just the preferred alternative(pg 105)? To me this kind of editorial bias is extremely unprofessional. Futher, it is impossible to reach some understanding of your intentions when the RMP is so vague. Please clarify the following: What are temporary exclosures(pg 111) and how will they affect the visitor experience, what are peak use periods(pg 105,11), what is considered a high use site(pg 111), what do you mean by riparian areas <u>may</u> receive priority (pg 11)? Please define what you plan to do and how. After all that is what the RMP process is for.

The BLM over the years has constantly shown a bias towards over developing recreation sites along the river. Unfortunately, the preferred alternative for the RMP perpetuates this poor planning. I read with shock the BLM's plans to upgrade undeveloped camping sites. This is grandiose and overdone. If you examine other wild

93 42

43

No. 42

Temporary livestock exclosures and selective grazing would be used within the Cow Creek Area of Critical Environmental Concern in Alternatives C and D. Exclosures would be constructed around high-use recreation sites within the Upper Missouri National Wild and Scenic River in Alternative D. These methods would be implemented in Cow Creek to allow riparian vegetation to reestablish and in the Upper Missouri National Wild and Scenic River to provide a more pleasant experience in highly used recreation sites along the river.

No. 43

The temporary exclosures referred to on page 111 of the draft would be a fence, either electric or jack-leg. Their intent would be to keep livestock out of portions of recreation sites. The peak (human) use periods refer to the primary recreation use season, which is from the weekend before Memorial Day through the weekend after Labor Day. The high-use sites are recreation sites identified as semi-developed in the draft document.

On page 11 the word "may" was changed to "will". These riparian areas will be prioritized in the revised river plan.

rivers you will find that this level of development is unheard of on rivers with use levels that far outstrip recreation use on the Missouri. Attempts to justify this over development with claims of sanitation problems have a hollow ring. The BLM's best public contact tool is the floaters guide and yet no where in the guide does the BLM outline proper sanitation and minimum impact camping techniques. Futhermore in my dozens of trips down the river the river rangers have yet to once approach me with such instructions. Why the rush to develop sites without first attempting less drastic and cheaper alternatives? Incidently, how does the BLM plan to pay for these developments when you are unable to even field an adequate river ranger staff? Please be specific.

44

On related recreation issues in the RMP: Referring to page 30, how does the BLM plan to differentiate between impacts caused by people and that of cows. Bare area is indicative of an over used site, but I suggest that most of that denuded area is caused by cattle use. Also could you please explain to me why management chooses 30% as an appropriate use level for outfitters? What exactly is the factual basis for this value?

45

With regard to cultural resource management, I believe it is a mistake to draw attention to cultural sites through the proposed interpretation and signing. This could only lead to increased vandalism and a reduction in the whole spirit of self discovery that is so important to the visitor experience on the Missouri. Leading people by the hand has no place on a wild river.

By way of closing, I would like to say that I feel the preferred alternative is fundamentally, and fatally flawed. The "C" alternative appears to best reflect the ecological and economic realities of the UMTWSR. I also think it was an unfortunate mistake to include planning for a national wild and scenic river in a resource area RMP. The appeal of the Missouri River portion of this draft will needlessly stall the entire RMP.

Sincerely,

Jeff Langen

94

No. 44

The decisions in the RMP would be implemented in 10 to 15 years, depending on budget, staff, public demand for facilities, and necessary resource protection along the river.

Inadequate funding would affect time and implementation of the management actions and project proposals. Other options available for funding developments include public contributions, cooperative agreements with private organizations, private sector initiatives and volunteers.

No. 45

The intent of temporary exclosures around high use recreation sites on the Upper Missouri National Wild and Scenic River would be to provide a more pleasant recreational experience.

The proposed alternative has been revised and does not limit the capacity for outfitter operations on the Upper Missouri National Wild and Scenic River. Carrying capacity would be based on the limits of acceptable change. For more information, see the Alternative D discussion in Chapter 2 of this document.

MONTANA POWER COMPANY mpc GENERAL OFFICES: 40 EAST BROADWAY, BUTTE, MONTANA 59701 • TELEPHONE (406) 723-5421

August 28, 1987

Mr. Wayne Zinne
District Manager
Bureau of Land Management
Lewistown District
Airport Road
Lewistown, MT 59457

Dear Mr. Zinne:

Thank you for the opportunity to comment on the Draft West HiLine Resource Management Plan, Environmental Impact Statement (EIS).

The Montana Power Company (MPC) currently provides electrical and gas service to customers within the West HiLine Resource Management area via an extensive network of transmission and distribution lines. MPC must be assured access to all MPC-owned facilities for repair and/or service. Thus, upon reviewing the EIS, we would like to make the following comments.

46 We commend the Bureau of Land Management (BLM) for recognizing the need for future utility corridors in the EIS. We do, however, recommend the EIS be revised to better reflect the Montana Department of Natural Resources and Conservation's major facility siting rules as posted in the Montana Major Facility Siting Act (MMFSA). For instance, clearly defined correlations between BLM's terminology, i.e., avoidance area, area of critical environmental concern, etc., and that of the MMFSA, i.e., exclusion area, sensitive area, etc., would help expedite future linear facility applications that may be required when the area's natural resources become more actively sought after.

47 The EIS does not differentiate between the effects of small transmission lines, such as 50 kV and large transmission lines like 500 kVs. The impacts that these lines have on the environment are extremely different and should be so noted in the final EIS.

75th MONTANA POWER COMPANY mpc 1912 ANNIVERSARY 1987

95

No. 46

The administrative language for the Montana Major Facility Siting Act (MMFSA) has the following correlation with BLM's terminology:

BLM	MMFSA
Exclusion Areas	Exclusion Area Avoidance Areas Sensitive Area
Windows	No apparent corresponding definition.

For definitions, please refer to the glossary portion of this document.

No. 47

The draft RMP did not differentiate between small and large electrical transmission lines. The term transmission line in the RMP refers to all types of transmission facilities.

The reason for the lack of a definition is because a 69 KV line or an 8 inch pipeline can have the same surface or visual impacts as a 230 KV line or 16-inch pipeline. Site specific impacts would be considered when BLM reviews right-of-way grant requests.

48 Map 4, which depicts off-road vehicle use and right-of-ways within the resource management area, incorrectly portrays MPC's transmission lines. Additionally, both transmission lines and highways are depicted by red lines on the map. This could be confusing to those unfamiliar with either, and could be easily solved by making a better distinction between the two with slashes, dashes, etc. We have provided two current MPC System Maps, i.e., one for electrical transmission and one for electrical transmission and gas lines for your reference.

49 We assume that the Department of National Resources and Conservation should read Department of Natural Resources and Conservation under Issue No. 3: Right-of-way Location on page 6 of the EIS.

We appreciate this opportunity to comment. Please send any subsequent information to Elvin Fitzhugh.

Sincerely,

D. M. Sprague, Manager
Environmental Department

DMS/EF/lh

Enclosures

180912

No. 48

The intent of Map 4 is to show the occupied corridors as shown in the Western Regional Corridors Study, 1986. The intent was not to show individual systems. Therefore, not all of Montana Power Company's system is shown. Information received during the public comment period resulted in BLM adding the Western Area Power Administration transmission line from Conrad to Shelby to Map 4 of the final West HiLine RMP and to our copy of the Western Regional Corridor Study.

Corridors have been portrayed so the differentiation between highways and corridors will be more easily made.

No. 49

The text has been revised.

Medicine River Canoe Club
Great Falls, Montana

August 30, 1987

Wayne Zinne, District Manager
Lewistown District, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Zinne,

RE: WEST HILINE RESOURCE MANAGEMENT PLAN

The BLM "90 day" comment period on this plan has ended. This time frame apparently began when the plan was published in May. However, a large percentage of interested people did not become aware of the plan until the public meetings were held in late July. In effect, this gave them only five or six weeks to comment.

The time allotted, mostly encompassing the month of August, is a prime vacation time for many which makes it difficult to inform interested people and give them time to respond.

50 We respectfully ask that you grant an extension to your comment deadline. We suggest October 15th as a reasonable and adequate date. From what we understand, public comment is and should be a major factor in your agency's decisions.

We are aware of several groups who are sincerely interested in the plan and are working on comments at this time. Their interests surely must be considered. An official extension of the comment period is certainly in the public's interest.

Thank you for your consideration.

Sincerely yours,

James W. McDermand

James W. McDermand, Spokesman
Medicine River Canoe Club
3805 4th Ave. South
Great Falls, MT 59405

No. 50

We appreciate your interest in the West HiLine RMP and agree that public comments are major factors in the BLM's decision making process. However, in order for BLM to adhere to its planning schedule and remain fair to the groups and individuals who have already submitted comments, we could not formally extend the comment period beyond September 3rd.

Nevertheless, we did accept comments for as long as possible after the September 3rd closing and made every effort to consider them while revising the document.

Hill Rte.
Chester, Mt. 59522
September 2, 1987

Wayne Zimne, District Manager
Lewistown District Office
Bureau of Land Management
Airport Road
Lewistown, Mt. 59457

Dear Mr. Zimne:

This letter is sent with our comments regarding the exploration being done in the Sweet Grass Hills. We request that these comments be placed in the record.

51 We are disturbed and opposed about the exploration and proposed mining. We are concerned about the affect it will have on the quality of the water and its effect on the hills, domestic animals as well as the wild life.

We are ranchers in the Sweet Grass Hills and are very concerned as our ranch is adjacent to the area and we are also on the Tootsie Creek drainage.

We believe that the BLM doesn't have the resources, interest or desire to properly protect this valuable natural area. We urgently request that Alternative C be approved. We also request that the additional 520 acres of Bureau of Reclamation lands NOT be opened to mining.

52 We would like any and all archeological studies done in the area of the Sweet Grass Hills prior to the road construction and drilling exploration done.

Sincerely
Janine L. Wolery
Daniel Wolery

(Typed exactly as received for reproduction in the Final RMP/EIS)

No. 51

Currently, there are no mine development proposals for the Sweet Grass Hills on BLM-managed surface, nor are there any permits pending authorization. There is an exploration plan that was approved in 1986, and is still active. Mitigation to prevent unnecessary and undue degradation to resources would be developed at the time BLM receives a Plan of Operation.

No. 52

Where necessary, the BLM has performed archaeological studies in the Sweet Grass Hills and has complied with the provisions of the National Historic Preservation Act (as in 36 CFR 800).

Information on the archaeological studies completed in the Sweet Grass Hills was provided by letter on September 14, 1987.

Chester, Mt. 59522
Sept. 2,1987

Dist. Mgr. Wayne Zinne
Bureau of Land Management
Airport Road
Lewistown, Mt 59457

Re:EIS plan-West HiLine

Dear Mr. Zinne,

Many of us here on the hi-line are concerned about the devestation going on in the Sweet-Grass Hills. There seems to be no concern for Indian relics and remnants of culture nor to the preservation of the beauty of the hills.

53 I would like to be reassured that the laws protecting such areas are being observed and that we can expect to honor the past as well as the future.

Sincerely,
Mrs Helen Kuhry
Box 555
Chester, Mt 59522

(Typed exactly as received for reproduction in the Final RMP/EIS)

No. 53

Please refer to response No. 52.

Box 361
Chester, Montana 59522
September 1, 1987

Wayne Zinne, District Manager
Lewistown District Office
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Dear Mr. Zinne:

This letter is sent with our comments on the West Hi-Line Resource Management Plan EIS. We request that these comments be inserted in the record.

We are opposed to mining in the Sweetgrass Hills, at least the way it is now being done. We have concluded that the BLM has neither the resources, interest or desire to properly protect this valuable natural area..perhaps it is a combination of the three. We urgently request that Alternative C be approved. Also we submit that the additional 520 acres of Bureau of Reclamation lands NOT be opened to mining.

54 We would like to receive information about the archeological studies that were conducted prior to all of the road construction and core drilling that has taken place. Doesn't the law require such studies before the disturbances take place? We are certain that it does.

Sincerely yours,

Marvin E. Krook

Carole E. Krook

Carole E. Krook

No. 54

Please refer to response No. 52.

MONTANA ASSOCIATION OF STATE GRAZING DISTRICTS

420 North California St.

Helena, Montana 59601

(406) 442-3420

John Pfaff, President ..... Miles City
Sever Enkerud, Vice President ..... Glasgow
Stuart Doggett, Executive Secretary ..... Helena

DIRECTORS
Bill Almy ..... Ismay
Lynn Cornwell ..... Glasgow
Mark Davies ..... Chinook
Joe Etchart ..... Glasgow
Jack Hughes ..... Grassrange

September 1, 1987

Mr. Wayne Zinne
District Manager, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Zinne:

The Montana Association of State Grazing Districts, the Montana Public Lands Council, and the Montana Stockgrowers would like to comment on the draft Resource Management Plan/Environmental Impact Statement for the West HiLine planning area of the Lewistown District.

We realize the public lands are under scrutiny not only from outside interests here in Montana, but across the United States and from Congress as well. We do not envy your position in having to please all these interests as well as livestock permittees.

However, it seems the livestock industry usually ends up giving something up when management is re-evaluated. On page 10, it is stated that the Bureau of Land Management and the Montana Fish, Wildlife , and Parks will cooperate when determining habitat and population size of wildlife. Landowners should also be consulted, we feel, as their private lands are where most wildlife are found.

In regard to riparian management, livestock can be used as a management tool to improve riparian areas. We encourage the use of riparian pastures as is stated on page 11. We also feel the permittee and the BLM should work together in regard to these management objectives. The improvement which will occur will benefit not only the permittee, but other multiple users as well.

Since the public lands are under multiple use objectives, not only will livestock have to get along with the other uses, but the other uses will need to cooperate with livestock.

We thank you for this opportunity to comment on this plan.

Sincerely yours,

Kim Enkerud

Kim Enkerud

101

55

No. 55

The BLM has and will continue to cooperate with the Montana Department of Fish, Wildlife and Parks and landowners to determine wildlife habitat and population size.

The text has been revised to include landowners.

DONALD R. MARBLE
Attorney at Law

MARBLE LAW OFFICE
WESTLAND BUILDING
P.O. BOX 649
CHESTER, MONTANA 59522
(406) 759-5104
1-800-237-4891

September 2, 1987

Wayne Zinne, District Manager
Lewistown District Office
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Re: West HiLine Resource Management Plan EIS

Dear Mr. Zinne:

This letter comprises my comments on the above described EIS and I request that the comments be inserted in the record.

I am opposed to mining in the Sweetgrass Hills, at least in the manner in which it is now being conducted. I concluded that the BLM has neither the interest, resources, or desire to properly protect this valuable natural area. Perhaps it is a combination of all three. Therefore, I request that Alternative C be approved. Also, I submit that the additional 520 acres of Bureau of Reclamation lands not be opened to mining.

56 Please advise me of the nature of archeological studies that were conducted prior to all of the road construction and coredrilling that has taken place. I know that the law requires such studies before the disturbances take place.

As regards the federal lands on the Marias River, there are a great many valuable archeological resources there that need immediate protection. ORTV should be strictly limited there as they cause great damage.

Sincerely yours,

Donald R. Marble

DM/ps

No. 56

Please refer to response No. 52.

Chester, Montana
September 2, 1987

District Manager
BLM
Airport Road
Lewistown, Montana 59457

To whom it may concern,

I am opposed to any type of mining in the Sweetgrass Hills. The return that the Town of Chester and Liberty county would recieve compared to the destruction of an area that many generations of the past and future have enjoyed or will enjoy isn't worth it. I will never understand industry and government's total disregard for the people of an area when they feel that there is some possiblity of gain from the destruction of something as beautiful as these isolated mountain ranges that we have in Montana. Just take a look at Zortman what it is now and what it was.

I would like to go on record as favoring Alternative C.

Cordially,

Wayne L. Wardell

Mayor of the Town of Chester

United States Department of the Interior
NATIONAL PARK SERVICE
MIDWEST REGION
1709 JACKSON STREET
OMAHA, NEBRASKA 68102-2571

IN REPLY REFER TO:

SEP 01 1987

L6017 LCT-MT(MWR-RE)

Memorandum

To: District Manager, Lewistown District Office, Bureau of Land Management

From: Associate Regional Director, Cooperative Activities, Midwest Region

Subject: Draft Resource Management Plan/Environmental Impact Statement for the West HiLine Planning Area

We have reviewed the subject document from our perspective as the Office responsible for administering the Lewis and Clark National Historic Trail.

104

We noted the commitment on page 14 that you will manage the segment of the trail within the planning area in a manner consistent with the purposes and provisions of the National Trails System Act. You have already taken a number of actions to manage the trail in accordance with our January 1982 Comprehensive Plan for Management and Use of the trail. Among these are the marking of public access sites with the official trail marker, the publication of an information booklet in 1984 which highlights the trail as well as the wild and scenic river, and development of new exhibits and interpretive materials about Lewis and Clark at the Fort Benton visitor contact station. We appreciate your initiative in these endeavors. We especially appreciate the manner in which your river manager, Mr. Chan Biggs, has coordinated his activities with our trail coordinator in this Office.

We hope to complete a slide/tape program about the Lewis and Clark National Historic Trail later this fall or early next year. We will provide you with a copy for the Fort Benton visitor contact station.

David H. Slind

MIKES IGA
Michael and Margaret Novak
Drawer H
U.S. Highway 2 East Chester, Mt. 59522
406-759-5538

9-2-87

BLM, District Manager
Airport Road
Lewistown, Mt. 59457

Sirs:

57 I am opposed to any strip mining or major road construction in the Sweetgrass Hills.

I favor alternative C of the West HiLine Resource Management Plan.

Thank you

Margaret M. Novak

(Typed exactly as received for reproduction in the Final RMP/EIS)

No. 57

Please refer to response No. 51.

September 2, 87

Wayne Zinne , District Manager
Lewisrown District Office
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Re: West Hi Line resource Management Plan EIS

Dear Mr. Zinne,

58 In regard to the planned stripmining of the Sweet Grass Hills, I am concerned about the effect of the mining will have on the water resources of this area. I am thereby opposed to the project in the manner it is being conducted. This Land is a valuable Natural Resource, and should be properly protected. I request that the option alternative C be approved, and that the additional 520 acres not be open to mining. Please include my comments in the record. Thank you for your consideration.

Sincerely Yours,

Trudy Laas Skari
Farmer in Liberty County

No. 58

Please refer to response No. 51.

Box 514
Chester, Mt. 59522
September 2, 1987

Wayne Zinne, District Manager
Lewistown District Office
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Dear Mr. Zinne:

59 This letter is written in regard to the West HiLine Resource Management Plan EIS. We are opposed to the mining that is planned for the Sweetgrass Hills and the manner in which the exploration has been done in 1986 and 1987. It appears that the BLM has neither the interest nor the resources to protect this area which has untold numbers of wild life and birds plus plants that are found in Glacier Park and the Bear Paw Mountains. This is a pristine area and a source of recreation for Liberty County and surrounding counties.

The Sweetgrass Hills is an unusual formation and contains many minerals other than gold. Seems they will be leveled just because of a large mining company wanting the gold.

We urgently request that Alternative C be approved. Also request that the additional 520 acres of Bureau of Reclamation lands not be opened to mining.

60 We would like any and all information on the Archeological studies done in the area of the Sweetgrass Hills prior to the road construction and core drilling.

Sincerely,
Janell & Wardell
&
M.Sterling Wardell

(Typed exactly as received for reproduction in the Fiial RMP/EIS)

No. 59

The exploration work completed has adhered to the protective stipulations in the approved exploration plan. For more information please refer to response No. 51.

No. 60

Please refer to response No. 52.

September 2,1987

Wayne Zinne, District Manager
Lewistown District, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Zinne:

I am a retired college professor. During the years of my tenure I was much involved with both the History and ecology of the Missouri River. I worked closely with Mr. Don Dentigney, the original river rat, was active in seeking, with others, the wild and scenic river designation for the river and for many years participated in a regular scheduled float trip made up of students from Northern Montana College. I am also featured in B. Gildent's book on the Missouri River. For many years the so called "Floating Classroom" has been and continues as a regular feature of the MNC summer program. There is much more but I do not want to write an autobiography but to suggest I have had a great deal of experience with the Missouri River of the breaks and white cliffs.

SUBJECT: WEST HILINE RESOURCE MANAGEMENT PLAN

First let me compliment you and those who put together the PLAN. It is most extensive and informative.

My broad philosophy about the river centers on the perpetuation and maintenance of the river as it was in the earliest of historical time. This would be the Lewis and Clark period. This may seem somewhat out of touch with our time; but I hold with it as an ideal. To me solitude, a sense of past times, an unspoiled habitat and a kind of magic that makes up the river are the things that need care - sorge - a deep loving care.

I would be cautious about ORV, pickups and RVs do not mix with the river.

Signs along the river are not needed. Hand outs or modestly printed maps such as you now have are excellent. Reading as you canoe produces involvement The process of identification that you with reading and examining maps is a good one

Current Ranger activity at Coal Banks and the Judith Landing are sufficient.

I do not know about current campground usage. At peak periods there may be crowding. I have not seen it. Camps at Hole in The Wall and Slaughter River could be expanded. That is a Fish Game and Parks (Montana) problem unless things have change. Additional sanitation facilities could be added at Eagle Creek. Some type of modestly improved campground is needed midway between Judith Landing and Cow Island. A water source would be helpful.

During breeding periods people should be kept off the islands. Oddly I do not recall seeing any island usage except of lunch stops.

61 I have a great deal of difficulty with consessions at Coal Banks or Judith Landing. I disapprove of the idea. I also think the idea is economically risky. How could anyone make money? The outfitters who operate out of Fort Benton - Bill Singer - do well and I'm sure would find moving a tricky business.

This represents my thinking on the subject.

Thank you for keeping me informed.

Sincerely,
Harrison Lane PhD

I do not type and apologize for my scrawl.

Phone: 265-7653 HAVRE MT - area code 406
Address: 133 8th St
Havre MT 59501

PS On the river as magic see "The White Cliff, A Place of Magic" slides by Don and Richard Dintiegry Narration by Wm Lisinby Text by Harrison Lane PhD

Call or write
Elinore Clark
Clark Museum
Havre, MT 59501

(Typed exactly as received for reproduction in the Final RMP/EIS)

No. 61

BLM's proposed alternative would encourage private sector initiatives in developing river management opportunities. If there is a need established for some type of facility, whether it be BLM or private sector initiative, the merits and economic feasibility would be assessed under the guidance in the Wild and Scenic Rivers Act, as amended, this RMP, and the Upper Missouri Coordinated Activity Plan.

For additional information please refer to the Upper Missouri National Wild and Scenic River Management section of the Proposed Alternative description in Chapter 2 of this document.

Box 296
Chester, MT 59522
September 2, 1987

Wayne Zinne, District Manager
Lewistown District Office
Bureau of Land Management
Airport Road
Lewistown, MT 59457

Dear Mr. Zinne:

I am writing concerning the West HiLine Resource Management Plan EIS. I request that my statement be inserted in the record.

As part of a family that farms just south of the Sweetgrass Hills, I am very disturbed with the manner in which mining is being undertaken in the hills. There appears to be no regard for careful building of roads, or any attempt to take care of the fragile environment.
62 | Of great concern to us is the potential for disruption of the water table with strip-mining. We, and many of our neighbors, depend on wells that are more than local in nature.

The unspoiled natural beauty ofthe Sweetgrass Hills means a lot to the residents of this area. To destroy that for a temporary profit for a few out of area residents seems to be very shortsighted.

Therefore, I request that the additonal BLM Lands in the hills not be opened for mining, and that Alternative C be approved.

Sincerely,

Darlene J. Skari

No. 62

Please refer to response No. 51.

Chester, Mt 59522
Sept. 2, 1987

Dist. Manager
Bureau of Land Management
Lewistown, Mt 59457

Re: West HiLine Management Plan EIS

Dear Sir:

63 I want to go on record as opposing the above EIS . I am definitely against the manner in which the mining is taking place in the Sweetgrass Hills. It seems that Federal laws requiring archeological studies are not observed by federal agencies. Perhaps this should be investigated by our congressman.

Please be assured of my continued interest in this sacrifice of natural beauty and resources. I request that Alternative C be approved if this is to continue.

Yours truly,

Erik Meis

Erik Meis
Box 52
Chester, Mt 59522

No. 63

Please refer to responses No. 51 and 52.

Sept 3

Dear Sirs

I am opposed to what you are doing in the Sweetgrass Hills. I prefer Alternative C to stop the mining and to not open the 529 acres.

The Hills are the only beauty we have here in Northern Montana and I want to see them left as they are as they are nature made. So please stop the mining in the Sweetgrass Hills. I can look out everyday and see these hills from my house and they are beautiful as they are.

Thanks,
Norma Layton
Box 224
Chester, Mt 59522

(Typed exactly as received for reproduction in the Final RMP/EIS)

9/3/87

Districk Manager BLM

Dear Sir:-

If anyone must go digging around and then deserting that area in the Sweet Grass Hills I would rather they used Alternative plan C. I believe any plan is just a lost investment.

Your
Almira Brevick
Box 73
Chester MT 59522

(Typed exactly as received for reproduction in the Final RMP/EIS)

BLM

My husband & I prefer Alternate C
& stop mining & not open the 529
acres of the Sweet Grass Hills.

Thank you
Gary & Joanna Standiford
(Chester Mt.)

(Typed exactly as received for reproduction in the Final RMP/EIS)

Due to the Deadline we are
unable to write a formal letter
We are in favor of
Alternative C
Dan &Cindy Crismore
Travis & Trent Crismore

(Typed exactly as received for reproduction in the Final RMP/EIS)

Wayne Zinne
District Manager
BLM Office
Airport Road
Lewistown, MT. 59457

Dear Wayne Zinne,

This letter is in responce to the West HiLine Resource Management plan. I work for Liberty County as Weed Supervisor. On a personal bases I think the mining operation is a great mistake. I have recently been in the area that the mining is proposed and the Santa Fe company has infact already disturbed a great deal of land. They will have a very hard time reclaming this land. and if they have filed a reclamation plan it has never passed through my office. Another reason that I think the mining should be limited is that I have seen just how distructive most operation of this nature can be. Now as far as the weed problem is concerned I would hate to see this area become infested with weeds. A perfect example is the Rock Quarry on East Butte. the Quarry was originally granted as a riprap source for reclamation projects. This area is now heavely infested with Spotted Knapweed and Leafy Spurge. and is coasting the landowner and the Bureau of Reclamation a great deal of money, and it's going to take many, many years clean it up.

64

I would like to see mining in this area limited, the Hills are the only place where a person can go and enjoy the beaury that can only be found in a moutainess area without traveling a couple of hundred miles. I am from the western part of the state originally and I think the Sweet Grass Hills compare very well with the western moutains except their not covered with Knapweed. Logging Roads and Mining camps, and I hope the never do . There just is not enough of the Sweet Grass Hills to go around so please keep the mining to a minimum.

116

David Burch

David Burch
Box 591
Chester, MT. 59522

No. 64

Disturbances greater than 5 acres require an approved Plan of Operations, which includes a reclamation plan. The reclamation plan would analyze impacts, and provides the opportunity for public participation when the identified impacts are significant or the level of controversy is high. However, these plans are not submitted for formal approval at local government levels.

For additional information please refer to the Mineral Resource Management section of the Management Common to All Alternatives description in Chapter 2 of this document.

39a

United States
Environmental Protection
Agency

Region 8, Montana Office
Federal Building
301 S. Park, Drawer 10096
Helena, Montana 59626-0096

EPA

REF: 8M0

SEP 0 2 1987

Wayne Zinne
District Manager
Lewistown District Office
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Re: West Hiline Resource Management Plan/Draft Environmental Impact Statement

Dear Mr. Zinne:

In accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act, the Region VIII Montana Office of the Environmental Protection Agency has reviewed the referenced draft environmental impact statement (EIS).

Specific comments are attached. The following is a summary of our review:

Based on the information provided in this Draft EIS, Alternative C has the least amount of acreage subject to the negative impacts addressed in this EIS, therefore, it appears to provide the greatest degree of protection to natural resources.

The management policies outlined in Chapter 2 could reduce the negative impacts under all alternatives. However, a more detailed description of these management techniques, a description of the criteria which govern their application, and an assessment of their potential to reduce specific negative impacts under each alternative is needed. This information could significantly influence the comparison of impacts under the various alternatives.

The West Hiline Draft RMP/EIS should also include a more detailed description of how the commitment to meet or exceed water quality standards will be accomplished (i.e., water quality/beneficial use maintenance monitoring and evaluation, and review to assure monitoring results are integrated into management decision making).

117

Existing wetlands resources within the Hiline resource area should be identified. A more extensive discussion of potential impacts to wetlands should be included in Chapter 4 for each of the alternatives.

In accordance with the criteria that EPA has established for rating draft environmental impact statements, we have rated this draft EIS as category EC-2 (Environmental Concern - insufficient information).

We would like to receive a copy of the Record of Decision when it is available. If you need further EPA assistance, please feel free to contact Lee Shanklin of my staff at (406) 449-5414 or FTS 585-5414. A summary of and references for specific plans to monitor and mitigate potential impacts to air and water quality should be provided.

Sincerely,

John F. Wardell

John F. Wardell, Director
Montana Office

Specific Reviewer: Steve Potts/Lee Shanklin, EPA Region VIII Montana Office

WEST HILINE DRAFT RMP/EIS July 1987

General Comments: Page 8

65 The Draft EIS states "that surface and ground water quality will be maintained to meet or exceed minimum State and Federal water quality standards". It should be emphasized that water quality standards are established to protect and maintain beneficial uses of water. The BLM's commitment to meet or exceed water quality standards means that BLM assures that its land management activities will not cause water quality deterioration to the extent that beneficial uses will be significantly impaired. We feel that the only way this commitment can be maintained is with implementation of a strong water quality monitoring program. Such monitoring is necessary to detect water quality degradation. Monitoring results then have to be integrated into the decision making process to assure that land management activities that cause watershed degradation are modified or halted before beneficial stream uses are significantly impaired. This plan should be developed and summarized in or included as an appendix to the EIS. It should include sampling parameters and frequency, and analytical methodologies or appropriate references.

66 The EIS also states on page 8 that ". . . BLM will comply with National and State Air Quality Standards". As with the preceding comment, a detailed monitoring and mitigation plan, and the criteria for its implementation, need to be provided or adequately summarized and referenced.

Page 8

67 The discussions of Soils Management should also include references to more detailed information on the methods for evaluating and reducing soil erosion and criteria for implementation of these activities.

Page 11

68 The RMP states that allotment management plans will be developed to improve riparian areas. A summary of the approach to be used would help. We would also like to request a copy of one of the allotment management plans for evaluation. The RMP also references a Montana Riparian Management Strategy. We also request a copy of this document.

Page 46

69 The definition of wetlands in this section identifies riparian areas as an extensive subset of wetlands including areas of widely differing features (i.e., lakes and pot holes). The variations in the characteristics of the areas listed as riparian or wetlands may directly affect the potential impacts and mitigations under all alternatives. It is also not clear whether some areas are considered wetlands but not riparian.

No. 65

The type of monitoring is dependent upon the type and location of the activity. Surface and groundwater quality would be maintained to meet or exceed minimum state and federal water quality standards.

Monitoring techniques, frequency and methodologies will be discussed at the activity plan level. For additional information please refer to the Water Resource Implementation section of the Management Common to All Alternatives description and the Monitoring and Evaluation section in Chapter 2 of this document.

No. 66

The BLM will evaluate impacts to air quality, at the activity plan level, and apply mitigating measures to ensure the continuation of the Class II airshed. Detailed monitoring and mitigation will be included in the activity plan.

For additional information please refer to the Air Quality Management section of the Management Common to All Alternatives description in Chapter 2 of this document.

No. 67

The methods used to make these evaluations are BLM Technical Note No. 346 (Erosion Condition Classification System) and the Modified Universal Soil Loss Equation Method developed by the USDA—Agricultural Research Station.

For additional information and text revisions please refer to the Soils Management Implementation portion of the Management Common to All Alternatives section in Chapter 2 of this document.

No. 68

Allotment management planning would consider riparian areas and their watersheds as a unit. Strategies to be considered include riparian pastures, stream corridor fencing, specialized grazing methods, winter grazing, use by a different species of livestock, and rehabilitation measures.

For additional information and text revisions please refer to the Riparian Area Implementation section of the Management Common to All Alternatives description in Chapter 2 of this document.

An allotment management plan and a copy of the Montana Riparian Management Strategy was provided.

No. 69

Some areas are considered wetlands but not riparian. Riparian areas are those areas within wetlands, geographically delineated by distinctive resource values and characteristics. Riparian areas are considered a component of wetland ecosystems.

The discussion on page 46 acknowledges the ". . . distinctive resource values and characteristics" which are used to "geographically delineate" riparian areas within wetlands. It would be helpful if these areas were specifically identified. The criteria for determining the "resource values and characteristics" used to delineate these areas should also be provided.

General Comment

70 This RMP lacks adequate identification and discussion of existing wetland resources in the West Hiline area, and potential impacts to wetland resources from implementation of the preferred alternative. Identification and analysis on wetland impacts should be expanded in this EIS.

Appendix 1.1

Based on the criteria listed in this appendix, it is difficult to determine how the term "Higher Value Resource Lands" is defined for a particular area or allotment. It appears that a particular piece of land could have conflicting resource values based on its surface and subsurface characteristics.

The application of this criteria and the definition of high value resource land impacts the evaluation of the possible affects from the proposed land disposition and acquisition plans. If an area is rated high for potential mineral resource but low for wildlife/livestock, is it retained? How is it evaluated against other areas such as one rated

71 high for a cultural resource or recreation?

If the land to be retained or acquired has a high value for oil and gas resources, and if BLM's management of oil and gas development was more stringent than State requirements, then maintaining these lands under BLM activity could have a positive environmental impact. However, if the same area is rated lower than another area with more positive surface resource attributes like wildlife habitat, the negative impacts from less stringently regulated oil and gas developments may outweigh the positive aspects of retaining the wildlife habitat.

Without knowing how the criteria will be applied and prioritization scheme, it is difficult to assess the potential impacts for any particular configuration of BLM holdings.

Table 2.6 - Summary Impacts Table

Many of the negative environmental impacts specified in this table could be mitigated to varying degrees under all of the alternatives presented. The degree of mitigation which BLM might be prepared to undertake could significantly impact the comparison between the

72 alternatives. It would be helpful to provide a similar summary of applicable mitigation techniques and the anticipated reduction to the impacts specified in Table 2.6 which would result from their implementation.

No. 69 cont.

Appendix 2.4 in the draft RMP/EIS lists the major riparian areas along the Upper Missouri National Wild and Scenic River. An extensive inventory has been completed that identified the general location of riparian areas (i.e., permanent streams, intermittent streams, potholes, etc.). An intensive inventory of riparian areas within the planning area is scheduled for completion by 1990.

Riparian areas were identified based on visible vegetation or physical characteristics, reflecting permanent water influence. Physical site characteristics include topography, aspect, gradient, elevations, soil type, influence by permanent water, water quality, and plant community.

For additional information please refer to the Riparian Area Implementation section of the Management Common to All Alternatives description of the Chapter 2 portion of this document and the Chapter 3 errata entry for page 46, column 2, paragraph 10.

No. 70

Existing wetland resources are discussed in Chapter 3 of the draft RMP/EIS. However, currently we do not have a complete wetlands inventory. We are in the process of doing an inventory, in cooperation with the Fish and Wildlife Service, for the Prairie Pothole Region.

Wetland impacts, specifically riparian, are addressed in the Impacts Common to All Alternatives section and in each alternative discussion (under the Vegetation heading) in Chapter 4.

Wetlands will be protected in accordance with provisions of Executive Order No. 11990, Protection of Wetlands. Under provision of this Executive Order, the agency must minimize the destruction, loss or degradation of wetlands when acquiring, managing and disposing of federal lands and facilities.

For additional information and text revisions please refer to the Water Resource Management section of the Management Common to All Alternatives description in Chapter 2 of this document.

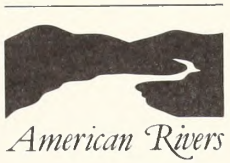
No. 71

The higher value resource lands language in Appendix 1.1 has been revised to clarify that disposal of public land will be done, per FLPMA, to serve the public interest. This RMP effort applied BLM State Director's acquisition, retention, and disposal criteria to the lands in the planning area. The criteria which applies to each resource area is shown in Appendix 1.1. As a result of evaluating the lands in the planning area against the criteria, lands were identified for disposal. These lands are shown in Appendix 1.2 and on the Land Pattern Adjustment Map (Map 3).

For additional information and text revisions please refer to the Issue Specific Criteria of the Land Tenure Adjustment portion of Chapter 1 and Appendices 1.1 and 1.2 in this document.

No. 72

Measures to avoid or reduce environmental impacts have been designed into the proposed management actions. The remaining impacts are identified in Table 2.6. Additional mitigation measures might be applied, if further assessment of environmental concerns at the activity plan level indicate the need. Appendices 2.2 and 2.6 list mitigating measures to protect resource values.



September 2, 1987

Wayne Zinne, District Manager
Lewistown District Office,
Bureau of Land Management
Airport Road
Lewistown, MT 59457

Dear Mr. Zinne,

I am writing to comment on the West Hiline Draft Resource Management Plan with respect to its treatment of rivers potentially eligible for inclusion in the National Wild and Scenic Rivers System. Section 5(d) of the Wild and Scenic Rivers Act, P.L. No. 90-542, 16 U.S.C. requires all federal agencies to consider potential national wild, scenic, and recreational river areas in "all planning for the use and development of water and related land resources." 16 U.S.C. Sec. 1276(d). In our view, the planning responsibility imposed by this section requires the Bureau of Land Management to assess the values of potential Wild and Scenic Rivers on BLM lands during the preparation of resource management plans (RMPs).

Our preliminary investigation of a series of Bureau RMP's indicates that potential additions to the wild and scenic rivers system are being largely ignored in the planning process. We recognize that this oversight was due in large part to insufficient administrative direction regarding the BLM's responsibility to consider potential wild and scenic rivers in the planning process. No specific guidelines have been in force for the evaluation of such rivers.

In a memorandum dated July 23, 1987, however, the Director of the BLM issued draft guidance for the identification, evaluation, and protection of potential wild and scenic rivers on public lands. This draft guidance reinforces the responsibility of the BLM under the Wild and Scenic Rivers Act. It is adapted from the 1982 joint USDA/USDI interagency guidelines concerning potential system additions and is similar to internal direction adopted by the U.S. Forest Service in Chapter 8 of its Forest Planning Handbook. While this draft guidance is not yet finalized, we believe it constitutes clear recognition of the Bureau's responsibility to protect rivers on public domain land.

The Wild and Scenic Rivers Act establishes only two requirements for rivers to be eligible for inclusion in the national rivers system: 1) the river must be "free-flowing;" and 2) the river must contain one or more "outstandingly remarkable" value, including scenic, recreation, geologic, fish, wildlife, historic, cultural, or other similar values. 16 U.S.C. sections 1271, and 1273(b). Rivers which meet these threshold requirements are eligible for consideration as potential additions to the national rivers system.

801 Pennsylvania Ave., S.E.
Suite 303
Washington, D.C. 20003
202-547-6900

The study process as outlined in the USDA/USDI Interagency Guidelines for the evaluation of potential wild and scenic rivers and the Director's draft guidance is made up of three separate parts:

1) ELIGIBILITY ANALYSIS - Eligibility determinations should be made for all rivers and river segments identified for further study. These eligibility determinations should be made according to the statutory requisite qualities stipulated in the Act (free-flowing, and containing one or more outstandingly remarkable value). It is extremely important that proper segmentation of study rivers is made in the evaluation of eligibility. The presence of disqualifying factors on one stretch of river does not make the entire river ineligible. An eligible river segment can be very short; a four-mile segment of the Horsepasture River in North Carolina, for example, was recently added to the national rivers system. The USDA/USDI Guidelines clearly state that a river segment is of sufficient length if, when managed as a wild, scenic, or recreational river area, the outstandingly remarkable values are protected. In addition, segments of a river may be eligible although separated by a stretch of river found to be ineligible. Likewise, there is no specific minimum flow requirement for eligibility. The Guidelines state that flows are sufficient if they sustain or complement the outstandingly remarkable values for which the river would be designated. Thus, "outstandingly remarkable" scenic, botanic, wildlife, wilderness, geologic, historic, and other resource values may all exist within a river corridor regardless of stream flow levels.

2) CLASSIFICATION - All segments found to meet the eligibility criteria for potential inclusion in the national system should be classified according to the USDA/USDI Guidelines as potential Wild, Scenic, or Recreational Rivers. The potential classification of a river segment is important because, once found eligible, the BLM must provide interim protection for eligible segments up to the level of their potential classification. Here again, segmentation of the eligible rivers is pertinent.

3) SUITABILITY ANALYSIS - A river's suitability for inclusion involves a recommendation by the BLM regarding the proposed future of eligible and classified river segments. A segment may be recommended for inclusion in the national system, or may be recommended for other uses if appropriate to a river's resources. Suitability determinations are based on a river's resource values and other practical considerations.

The standard starting point for the evaluation of potential wild and scenic rivers is the National Park Service's 1982 Nationwide Rivers Inventory (NRI). However, since the NRI does not include Montana, the West Hiline planners must identify appropriate rivers through other means such as: the Pacific Northwest Rivers Inventory; public interest; professional judgement; state agency studies, reports and information; and natural heritage data.

40c

It should be noted that in cases where the BLM has responsibility for an insignificant portion of the lands along a river deemed worthy of potential consideration as a wild and scenic river, the BLM is responsible for coordinating the river study with another group or agency identified as the lead agency for the river.

73 We respectfully request that you evaluate the rivers in the West Hiline planning area for their potential eligibility for inclusion in the national rivers system in accordance with the draft direction for rivers planning and protection contained in the Director's July 23, 1987 memo, and mandated by the requirements of the Wild and Scenic Rivers Act and the USDA/USDI interagency guidelines. We also ask that any rivers found eligible for inclusion be provided specific interim protection in accordance with their classification -- wild, scenic, or recreational -- until such time as detailed suitability studies can be completed.

As you can see from the enclosed New York Times piece, we have enjoyed a positive working relationship with the U. S. Forest Service. We believe that the BLM, too, is in excellent position to protect rivers under its own stewardship. We look forward to working with you in this important, publicly supported effort.

If you should have any questions please contact me or Jamie Fosburgh of this office.

Sincerely,

W. Kent Olson
President

123

No. 73

The river systems in Montana were not studied for potential inclusion in the National Wild and Scenic Rivers system during the original National Rivers Inventory.

Final guidance on handling the evaluation of potential Wild and Scenic Rivers in Montana has not been provided at this time. Interim management guidance for portions of rivers under BLM administration in the planning area has been provided in the Management Common section of Chapter 2 of this document. An example would be land acquisition and limitations on ORV use along the Marias River. Upon receipt of final guidance, the BLM will consider a plan amendment or update to evaluate the potential of rivers for inclusion in the National Rivers Inventory. Public opinion would be gathered at this time.

L.M. PETTERSON, D.D.S.
Box 1750
Havre, Montana 59501

Telephone: 265-6413

Mr. Zinne,

I am opposed to commercial development of the Missouri river area. We certainly do not need concessions there nor are they desirable. Maintance and improvement of camping areas at the crossings of the river is fine and an improvement on the visitor experience. Developed RV campgrounds is a different matter.

There was a time in the history of our use of wild scenic areas when the policy method was to construct access and accommodations to enhance vistor comfort. We have learned that such development works toward the loss of the "wild & scenic" we prize. The designated area of this stretch of the Missouri is narrow & easily disrupted. We are fortunate that the advances of "civilization" have bypassed this stretch to date. Lets preserve rather than destroy what we have.

Thank You

M. Petterson

(Typed exactly as received for reproduction in the Final RMP/EIS)

Chevron

Chevron U.S.A. Inc.
6400 South Fiddler's Green Circle, Englewood, CO 80111, P.O. Box 599, Denver, CO 80201

Lisa Flesche Mercier
Staff Analyst
Legislative and Regulatory Affairs

September 3, 1987

West Hiline Draft RMP/EIS
BLM Montana

Mr. Wayne Zinne, District Manager
Lewistown District
Airport Road
Lewistown, MT 59457

Dear Mr. Zinne:

Chevron U.S.A. Inc. is the leaseholder of 9,000 productive and 25,380 nonproductive acres in the West Hiline Resource Area, and thus, we are very interested and concerned about the proposed RMP/EIS. There are several problems with your proposal that need to be addressed.

74 We are confused regarding the areas that would be closed to leasing under your preferred alternative. On page 9, it is stated in Table 2.2 that 41,385.23 acres would be in this group, and yet on page 107, the acreage closed to leasing in the high and moderate potential columns add up to 120,113 acres. Why is there such a discrepancy?

75 Chevron also questions how you can justify closing the recreational and scenic sections of the UMNWSR Corridor to oil and gas leasing. The Wild and Scenic Rivers Act only excludes wild rivers from leasing. You base your decision on the Solicitor's Opinion in Appendix 2.1, and yet from the information and maps provided in the document, we cannot determine if all of the recreational and scenic sections of the river are covered by that Opinion. Please explain.

Chevron is opposed to the designation of the Kevin Rim area as an Area of Critical Environmental Concern (ACEC). We believe that the BLM can "protect and prevent irreparable damage" to this area's important raptor habitat and cultural values under existing statutes and guidelines, such as the Rocky Mountain Front raptor guidelines in Appendix 2.9 and the Archaeological Resource Protection Act. Therefore, we do not understand why this area, which contains the oldest operating oil field in Montana, needs to be designated as an ACEC. Our industry's operations have not damaged these important values after all these years, and they won't in the future. On page 107 it is stated that an ACEC designation would "create a significant negative impact to oil and gas developers by increasing operation costs." We just do not believe that there is a good reason why we should be subjected to increased operating costs when these important values are currently being protected.

76 Chevron has a serious problem with the statement in the first full paragraph on page 29 under the caption "Kevin Rim Implementation," that the "BLM would use the guidelines to develop stipulations for new development on existing oil and gas leases." The BLM does not have the authority to develop new stipulations for new developments on existing oil and gas leases.

No. 74

The total acreage segregated from mineral entry, Table 2.1, plus the acreage managed under a no lease policy, Table 2.2, (110,638 acres) corresponds to the revised acreage figures given in Tables 4.1, 4.2, 4.3 and 4.4 in the errata section of this document.

No. 75

Please refer to response No. 37.

No. 76

The document has been revised to read "BLM would work with operators to apply the guidelines to new development on existing leases." For more information please refer to the Kevin Rim Implementation portion of the Alternative D description in Chapter 2 of this document.

77 We do not understand what you mean at the bottom of the left column on page 29 where you propose a management zone "to ensure that development of federal minerals under private and state surface will be regulated, where authority exists, to follow the same guidelines implemented on the ACEC." The BLM does not have the authority to control the use of or impose stipulations upon private surface acreage.

78 In Table 4.4, page 107, the acreage figures on which the BLM plans to apply stipulations adds up to 1,121,467 acres. Comparing this amount with the figures in Table 1.1, page 2, we cannot figure out how you arrived at this amount.

In conclusion, Chevron cannot support your preferred Alternative D at this time due to all of the unanswered concerns and problems that we have pointed out. Thank you for the consideration of our comments.

Sincerely yours,

Lisa Fl-de Mercier

L. F. Mercier

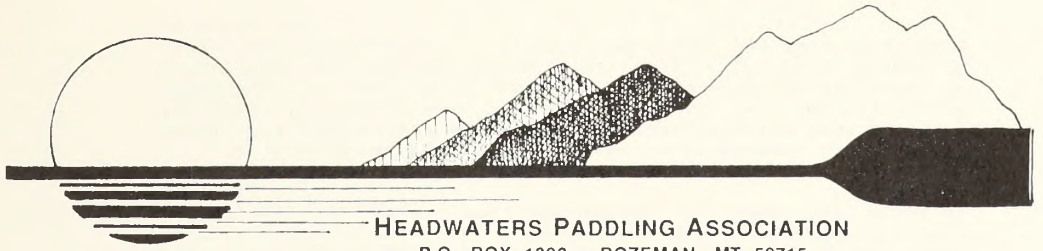
LFM:js

No. 77

The management zone concept has been deleted from this RMP. For further information please refer to the response to comment 32.

No. 78

Please refer to response No. 29.



HEADWATERS PADDLING ASSOCIATION
P.O. BOX 1392 · BOZEMAN, MT 59715

September 3, 1987

Mr. Wayne Zinne, District Manager
Lewistown District, B.L.M.
Airport Road
Lewistown, M.T.

Subject: West Hiline Resource Management Plan

We are an association of over 100 river users from south central Montana who frequently enjoy the sceinic and historic resources of the Upper Missouri National Wild and Scenic River(UMNWSR). Please consider the following comments regarding the draft management plan. We have attempted to respond to specific issues and alternatives where pertinent and are also submitting general comments regarding management of the UMNWSR.

79 Initially, we wish to formally protest the exceptionally short review period. Resource issues within the river corridor can best be studied and understood by floating all or a portion of the subject section. The logistics of such a float make it impossible for many interested parties to submit knowledgeable comments within the review period. We request that the deadline be extended at least an additional sixty days. Regardless of whether or not an extension is granted, please consider the following comments:

Land Tenure:

We strongly support a policy of acquisition, through exchange or purchase, of private lands within the boundary of the UMNWSR with emphasis on riparian areas. No B.L.M. lands within the corridor should be subject to disposal. Alternative C appears to most closely address these needs.

Off-Road Vehicle Management:

ORV use within the boundaries of the UMNWSR should be restricted to the greatest extent possible within wild and scenic sections. The basic values of remoteness, solitude, and silence, long recognized as fundamental assets of the UMNWSR, are completely compromised by the intrusion of ORV's. In addition, the visitor's associations with the rich historic herritage, the feeling of "experiencing" history is likewise destroyed. Alternative C most closely addresses these concerns. We support the closure of the Gist Ranch road before it drops into the Breaks to protect walk-in hunting values and the opportunity for solitude at this location.

No. 79

The public review period began on June 5 and ended September 3; a span of 90 days. For further information please refer to response No. 50.

Right-Of-Way Location:

We support action which would most limit the impacts of utility lines within the UMNWSR boundaries. Alternative C is preferred.

Emphasis Areas:

Alternates C/D preferred for Cow Creek. The close historic association of the "Nez Perce Trail" with the river corridor should be recognized in management and interpretation.

UMNWSR Management:

Visitor Services: There does not appear to be any need to consider "limiting" the number of float opportunities at the present time. Determination of "capacity" based on "limits of acceptable change" is a reasonable approach. Alternatives C/D are preferred.

The visitor services center at Fort Benton serves a useful function at least from Memorial Day through Labor Day. The Ranger Station at Coal Banks also serves a significant number of floaters and should remain open through Labor Day. The Judith Landing station is of questionable necessity during any part of the season. Extension of the visitor services season through Thanksgiving does not seem warranted at any site. Alternative A (with the elimination of the Judith station) is preferred.

Interpretive facilities should definitely not include signs and displays on the river. These visual intrusions would be "forced" on all visitors regardless of their interest levels and would significantly detract from the impressions of remoteness and self-reliance which are of such fundimental importance. Interpretation of historic, archaeological, and geological resources is very important, but can be adequately addressed through displays at the Fort Benton visitor center and through photos and text in a "River Digest". We recommend that the "Digest" be expanded to include keyed maps (perhaps by incoroprating an expanded "floaters guide"), geological and archaeological information, and that it be made available for purchase as well as on loan.

Recreational use of islands should be discouraged during the waterfowl nesting period, but should not be outlawed at any time. Use of islands, especially during the spring runnoff, is at a relatively low level and disturbance to waterfowl would be minimal.

Facility Management: Emphasis should be placed on providing additional undeveloped sites at key locations. The most pressing facility development need on the river is for fencing around campsites to exclude livestock. Exclosures should also be constructed and maintained around young cottonwood stands to eliminate cattle impacts. Alternative C with the noted additions is preferred.

Concession Management: Major concession services are not desireable or necessary anywhere within the corridor. Alternative A is preferred.

Health and Safety: The B.L.M. should continue to cooperate with State and local authorities of law enforcement operations, but should also seek internal enforcement authority to better control ORV use and violations of motorboat restrictions. Alternative A is preferred with additional authority to B.L.M. personnel.

In addition to these specific comments, please consider the following:

There has long been a pressing need for the B.L.M. to reduce livestock grazing pressures on riparian habitat within the UMNWSR corridor and to actively address the need to maintain and re-establish cottonwood stands. Why were these issues not addressed in the management plan?

80

In conclusion, we feel that the B.L.M. must continually strive to maintain the remote, undeveloped character of the Wild and Scenic Missouri. A sense of solitude and adventure can be severely degraded by unnecessary and inappropriate development and management. It is the undeveloped "wilderness" character that has always been the foremost asset of this unit of the Wild and Scenic River System. The B.L.M.'s primary management goal should be the retention of this special character.

Thank you for your consideration.

Sincerely,

Dick Ellis

Dick Ellis
Issues Committee
Headwaters Paddling Association

No. 80

The scoping process did not identify riparian management within the Upper Missouri National Wild and Scenic River as an issue for this RMP. General land guidance for riparian management was brought forward in the Management Common to All Alternatives section from previous environmental impact statements. A Coordinated Activity Plan will be prepared for the Upper Missouri National Wild and Scenic River which will address riparian management in greater detail. The major riparian areas (listed in Appendix 2.4) may receive priority for intensive management during the life of this plan.

For additional information on riparian management please refer to the Riparian Area Implementation section of the Management Common to All Alternatives description in Chapter 2 of this document.

MONTANA WILDERNESS ASSOCIATION

Sept. 9, 1987

District Manager Wayne Zinne
Lewistown District, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Zinne:

MWA wishes to comment on the draft West HiLine RMP. I hope you will accept these comments in spite of their tardy submission; summer is a difficult time for volunteers to meet deadlines.

Land Tenure Adjustment.

MWA supports both the acquisition of lands in emphasis areas (Kevin Rim, the Hills, UMNWSR, Cow Creek) and areas of high wildlife value (e.g. Marias River, northern Blaine Co.) as per Alt. C, and the disposition (including sale) of isolated, uneconomical or marginally important lands as per Alt. B.

ORV Management.

81 The first sentence of the second criterium on p. 6 needs clarification. Also, the executive orders refer explicitly to conflicts with other (non-motorized) users - your criteria should include parallel language.

We support the Alt. C management proposal, with two modifications: 1) travel on roads and trails in sedimentary breaks type soils could be allowed on designated routes during wet conditions; and 2) seasonal restrictions in wildlife areas should require vehicles to use designated, not just existing, roads and trails.

82 I wish you had identified the management activities responsible for the projected budget increases noted on p. 31. I suspect that vehicle-use management may be a major additional expense. MWA strongly believes that such expense is warrented by the resulting benefits to surface resources and to non-motorized users.

ROW Location.

Alternative D is acceptable, with the following modifications: 1) no communication sites on Middle Butte; and 2) only existing corridors in the UMNWSR could be utilized.

Emphasis areas.

MWA endorses the Alternative C management proposal as written for the Kevin Rim, Sweetgrass Hills and Cow Creek areas. Regarding the UMNWSR, we support prescriptions from several alternatives, namely:

a) the use of LAC to determine user capacity;
b) seasonal closures of islands;

P.O. Box 635 • Helena, Montana 59624 • (406) 442-0597

No. 81

The off-road vehicle criteria has been revised. Please refer to the Off-Road Vehicle Issue Specific Criteria portion of Chapter 1 in this document.

No. 82

The decisions responsible for the projected budget increases are primarily the implementation of extended visitor services at Fort Benton, Coal Banks and Judith Landing (Alternatives B, C and D). In addition, Alternative C would require full BLM law enforcement responsibility within the Upper Missouri National Wild and Scenic River, while Alternative D would expand the BLM's role in law enforcement and search and rescue.

For additional information and text revisions, please refer to the Budget Assumptions section in Chapter 2 of this document.

c) no interpretive activities (signs/displays) outside of launch/take out points;
d) facility management as per Alt. A;
e) concession management as per Alt. C, except for substituting the following language: "Outfitters may be restricted to a percentage of the daily user capacity";
f) health and safety as per Alt. C.

Sincerely, Cedron Jones

Cedron Jones, MWA Council

Department of Energy
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

SEP 8 1987

In reply refer to: SJ

Mr. Wayne Zinne, District Manager
Lewistown District Office
Bureau of Land Management
US Department of the Interior
Airport Road
Lewistown, Montana 59457

Dear Mr. Zinne:

Bonneville Power Administration (BPA) has reviewed the Draft Environmental Impact Statement (EIS) for the West HiLine Resource Management Plan.

BPA has no comments on the proposed management plan. We are writing to express our appreciation for the excellent job you did of addressing energy transmission corridors in the EIS.

Thank you for keeping us informed of your planning activities.

Sincerely,

Anthony R. Morrell
Environmental Manager

132

Celebrating the U.S. Constitution Bicentennial — 1787-1987

EDUCATION - CONSERVATION

Montana Wildlife Federation

AFFILIATE OF NATIONAL WILDLIFE FEDERATION

P.O. Box 3526
Bozeman, MT 59715
(406) 587-1713

September 9, 1987

Mr. Wayne Zinne, District Manager
Lewistown District, BLM
Airport Rd.
Lewistown, MT. 59457

Dear Mr. Zinne:

Please accept these comments on your West HiLine Resource Management Plan as they relate to that portion of the Missouri River designated as wild and scenic. We acknowledge that the comments are being submitted after your public comment deadline. Since the comment period was so brief we are hopeful you will accept them anyway.

The Montana Wildlife Federation is a citizen group of around 4,600 sportsmen in Montana and elsewhere. Our concerns center on maintaining quality hunting and fishing in Montana through conservation of wildlife habitat. It is in this light that we register these comments.

We are concerned about the plans you have made which increase development along the wild and scenic corridor. We feel that this designation should direct management of the corridor toward maintaining its wild character and minimizing the extent of development or even of human presence in the form of signing and displays. This is a special stretch of the Missouri River which people use because of its wildness. Human presence and further development can only degrade this quality.

OFF-ROAD VEHICLE MANAGEMENT:

We are opposed to ORV use along the river corridor. We are concerned about the effects of erosion and the spread of noxious weeds as well as the impacts on wildlife and the threat to riparian areas along tributaries within the management area. Again, the wildness of the area should be paramount along this stretch of river. ORVs not only impact the ground but also invade peoples' solitude and privacy.

LAND OWNERSHIP PATTERNS:

We have consistently supported blocking up of public lands. Where we feel caution is necessary is in being certain that lands to be traded out of in case of trades are of little value to the

public in terms of their wildlife resources. We support the use of Land and Water Conservation Funds to purchase lands in important wildlife areas. It is likely that lands you are considering would fall under this category.

VISITOR SERVICES:

We are opposed to increased signing or any interpretative displays in the wild and scenic corridor. This, like ORV use, would degrade the wild quality of the river and detract from its value under this designation.

FACILITY MANAGEMENT:

We endorse Alternative A for the section on Facility Management. We urge you to keep the sites as undeveloped as possible, just providing for sanitation in the event of increased use of the river. Again, more development detracts from the aesthetic value of the corridor as wild and scenic.

CONCESSION MANAGEMENT:

We are thoroughly opposed to the development of any major concessions in any area of the river corridor. We support Alternative A. The thought of marinas, RV parks, etc. in a wild and scenic river corridor is untenable. These concessions have no place around or near a wild and scenic river. Their presence would belie the very concept on which this designation was given and would be highly detrimental to people who look to that designation as a form of protection for a valued stretch of river.

We agree completely with the comment by the Medicine River Canoe Club that "This river corridor is a magnificent heritage that should be preserved as nearly as possible in its natural state. It gives man an opportunity to step back in time, to reflect, to enjoy and to appreciate moments of history."

Thank you for considering our comments. We look forward to a favorable response to their substance.

Sincerely,

Tony Schoonen

Tony Schoonen
President

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
U.S. Fish & Wildlife Enhancement
Federal Bldg., U.S. Courthouse
301 South Park
P.O. Box 10023
Helena, Montana 59626

IN REPLY REFER TO:
FWE-61410

September 9, 1987

To: District Manager, Bureau of Land Management, Lewistown District, Lewistown, Montana

From: Field Supervisor, Montana-Wyoming Field Office, Fish & Wildlife Enhancement, FWS, Helena, MT (FWE-61130)

Subject: Review of Draft West Hiline Resource Management Plan/EIS (ED# 87/5)

We have reviewed the subject draft and have no comments on the document.

cc: Suboffice Coordinator, USFWS, Billings, MT (FWE-61410)
USFWS, ES, BEC, Washington, D.C.

DC/tz

Belt, Montana
Sept. 3, 1987

Wayne Zinne, District Manager
Lewistown District B. L. M.
Airport Road
Lewistown, Montana 59457

Dear Mr. Zinne,

Thank you for providing the Draft of the West Hi Line Resource Management Plan and the Environmental Impact Statement.

Alternatives C or D are favored for Cow Creek, listed on page 34.

The following comments pertain to Management of the Upper Missouri National Wild and Scenic River;

Visitor Services:

Alternative C is favored with the exception that portions of some islands could accomodate camping use at times and places where no significant resource damage is indicted.

Facility Management
Concession Management
Health and Safety

On all three of these Alternative A is preferred.

During the many years that protection of the Missouri River was being considered, a subject that frequently came up was the extent of visitor use and how it could be managed consistent with minimizing resource damage. L. A. C. addresses this issue but concession services would accelerate visitor use and is not consistent with the purpose of the Wild and Scenic Rivers Act.

The National Park Service produced the first report which described the numerous values of this stretch of river. The Park Service planners were striving to disperse crowds from other parks and to impress Congress. With large numbers they projected river use figures that were unacceptable to those working toward river protection.

The Bureau of Land Management was selected to manage the Wild and Scenic River because it was the agency most likely to maintain the river as it had been and had no reason to promote and increase visitor use.

Resource Management should have been included as an additional category. Several subjects could have been addressed under this heading, such as management of cottonwood groves.

Throughout much of the corridor above the C. M. R. only old growth cottonwoods exist. Reproduction can only be found where protection from livestock is provided.

Other resource management subjects could have been included.

Sincerely,

Vels A. Thoreson

Vels A. Thoreson
120 Thoreson Road
Belt, Montana
59412

136

State of Montana
Office of the Governor
Helena, Montana 59620
406-444-3111

TED SCHWINDEN
GOVERNOR

September 15, 1987

Mr. Wayne Zinne
District Manager
Lewistown District
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Dear Mr. Zinne:

The State of Montana appreciates the opportunity to review and provide comments on the Bureau of Land Management's West Hiline Range Management Plan/Environmental Impact Statement (RMP/EIS). The attached comments were prepared from comments submitted to my office by the Montana Department of Fish, Wildlife and Parks as a result of a review of the RMP/EIS by the state's Interagency Planning Task Force.

Thank you again for the opportunity to comment.

Sincerely,

TED SCHWINDEN
Governor

Enclosure

STATE OF MONTANA
COMMENTS
ON
BUREAU OF LAND MANAGEMENT
WEST HILINE RANGE MANAGEMENT PROGRAM
DRAFT ENVIRONMENTAL IMPACT STATEMENT

Appendix 1.1 of the RMP/EIS includes a list of land tracts that may be suitable for disposal through land adjustment actions. Several of the tracts included in the list are large in size and include significant wildlife habitat and potential public recreational opportunities. Wildlife values on tracts of 320 acres or greater should be thoroughly evaluated before these tracts are included in a land exchange proposal. Several of these tracts offer important "islands" of wildlife habitat and in some cases are surrounded by substantial areas of land committed to intensive agricultural activities, such as grain growing. This is especially true in deer hunting district 610 and 612.

Public access to public lands for recreational purposes is an important issue. The Bureau of Land Management's (BLM) land tenure adjustment program should continue to carefully consider the importance of preserving existing access opportunities, while securing additional access where possible.

The RMP/EIS indicates that the preservation and establishment of riparian areas around West Hiline fishing reservoirs is a goal of the management plan. The uncontrolled use of these areas by cattle, however, can work to the detriment of this goal. It is suggested that the use of fencing, stock tanks and watering corridors will enhance the possibility of achieving the program's riparian area goals while still allowing sufficient access to water sources for cattle. The number of sport fishing reservoirs in the planning area is relatively small, and should not present an unreasonable burden for the BLM in implementing these types of riparian protection measures. The example of fencing and stock tank provision for Reser Reservoir in Blaine County is a good example of achieving optimum multi-purpose use of BLM reservoirs.

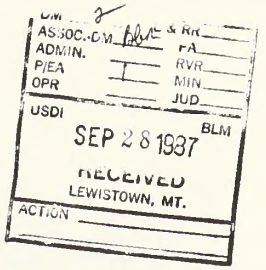
The Montana Department of Fish, Wildlife and Parks recommends that Burns and Glynda Reservoirs be deleted from BLM's request for fish stocking (page 12, 2nd column, 2nd paragraph of the RMP/EIS). The department considers these reservoirs to be unable to support sport fisheries of any kind.

83

No. 83

We concur with your recommendation and Burns and Glynda reservoirs have been deleted from BLM's request for fish stocking.

Ethnoscience
711 Rimrock
Billings, Montana 59102
Phone: (406) 252-7945



Wayne Zinne
District Manager
Lewistown District Office
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Dear Sir:

I am writing in order to comment on the Draft West HiLine Resource Management Plan Environmental Impact Statement. I have comments on two issues, the treatment of cultural resources in general and the specific treatment of the Sweet Grass Hills.

Cultural Resources.

84 1. None of the alternatives in the RMP treat cultural resources in an active fashion. No alternatives are presented which really involve managing these resources. The plans for action are reactions to leases or land exchanges. One consequence of this is that the BLM is presenting a document that strongly implies that cultural resources at best will always be considered of secondary importance in any resource management decision. This is inappropriate given BLM's mandated FLMPA and NEPA responsibilities.

At a minimium Alternative C should consider developing regional cultural resource management strategies based on the number of acres already inventoried, the nature and classes of sites found, their distribution relative to topographic and other environmental variables, and the scientific, heritage and public educational values these resources represent. The development of this archaeological data base and its concomittant management strategies would give BLM decision makers the tools they need to make systematic and defensible decisions concerning cultural resources prior to decisions to lease or make land exchanges.

No. 84

Cultural resource management was not identified as a planning issue in this RMP. The management of cultural resources in the planning area will continue in accordance with BLM policies, manuals, and regulations.

All alternatives in the RMP would provide for the enhancement and protection of cultural resources. Cultural resources would be given full consideration in all management decisions, and activity plans may be developed for significant cultural resources on public lands.

For additional information please refer to the Cultural Resource Management section of the Management Common to All Alternatives description in Chapter 2 of this document.

50b

2. Cultural resources are only dealt with in the overall section and not explicitly in the discussion of each alternative. This appears to be inappropriate because the different alternatives will have different effects on cultural resources. For example, any increase in the amount of recreational traffic in archaeologically sensitive areas will have negative impacts on archaeological resources which will need to be mitigated by positive actions on the part of the BLM. Vandalism is a major concern in the preservation of cultural resources. Nowhere in this document is this issue considered.

85

Sweet Grass Hills

1. Although Native American concerns about preserving the the natural environment of the Sweet Grass Hills are noted in the RMP, the central underlying issue is not addressed. In my view, the basic conflict between the hard rock mining uses of the area and the continuing use of the area for traditional religious purposes can not be adequately addressed without considering apparent conflict between the First Amendment to the Constitution, the 1872 Mining Act and P.L. 95-341, AIRFA. While the West HiLine RMP is certainly not the vehicle in which to make legal decisions concerning this issue nor are long complex discussions of constitutional law appropriate, it is misleading to the public not to acknowledge that the conflict over these two uses of the Sweet Grass Hills has serious far-reaching legal implications that extend far beyond the immediate issue whether to allow a mining haul road to be build in a traditional vision questing area. A brief (1 paragraph) discussion of the major points of each of these legal documents as they relate to these issues should be included in the initial discussion of the uses of the Sweet Grass Hills.

140

86

2. All alternatives except C call for the revoking of the Bureau of Reclamation withdrawl of 529.67 acres on the East Butte. This would result in this area being made available for mineral entry and this in turn would result in significant negative impacts on the religious use of the

No. 85

The impacts to cultural resources from implementing each alternative are discussed in Chapter 4 of the draft RMP/EIS.

All alternatives would provide for the enhancement and protection of cultural resources. This would include the protection of archaeological sites from vandalism.

For additional information please refer to the Cultural Resource Management section of the Management Common to All Alternatives description in Chapter 2 of this document and pages 85, 92, 101 and 110 in the draft RMP.

No. 86

The conflict between mineral extraction and Native American religious practices is acknowledged in the draft RMP/EIS (page 79). It is beyond the scope of this document to outline the provisions of the conflicting laws.

50c

area. More appropriate action, given the ongoing dispute between these two uses of the area, would be for the BLM to consider Alternatives A, B, and D where the two interested parties are allowed to petition the BLM to consider various compromise management strategies. For example, an advisory board made up of industry and Native American representatives could be set up and charged with suggesting pathways which would allow for dual use of the Sweet Grass Hills. As it stands the BLM appears to have already decided on giving precedence to the mining industry.

On the other hand, if this is indeed a policy decision that the BLM has already made, then the rationale for this policy should be incuded in the RMP. Further a statement concerning the high probability that this policy will result in further legal actions brought by Native American groups against the BLM should be included.

87 3. Note should be made of the fact that the religious use of this area also includes Canadian Indians, Blackfeet and Stoney and thus this issue may have international implications.

141

Finally, I have one general comment about the nature of the RMP in general. Montana is a pluralistic society. It has within it borders many different tribal groups in addition to the dominant Anglo-Saxon majority. All of the comments and assessments concerning Social Setting/Lifestyles in the RMP are couched and measured in terms of the value systems of the dominant Anglo-Saxon majority (eg. pg 76). (This is also true of every other RMP and EIS I have ever read.) It is unrealistic to expect that all measures of all value systems be included in all documents of this nature, but I

88 would like to take this opportunity to point out the inherent bias this creates in the document. If you start from the assumption that social well being can be accurately measured by "the number of physicians, crime rates, income, education, employment and household conveniences" then it is build-in that the culturally dictated necessity for solitude in religious/cultural life will not be considered important to social well being. This is patently incorrect for many

No. 87

BLM has noted the Sweet Grass Hills Area of Critical Environmental Concern is unique because of its traditional religious importance to Native American tribes including the Blood and Stoney. However, the BLM does not have documentation of the Blood and Stoney utilizing the area for religious purposes.

For additional information and text revisions please refer to the Sweet Grass Hills section of Chapter 3 in the draft RMP/EIS and the Chapter 3 errata entry for page 62, column 1, paragraph 10.

No. 88

The terms and indicators of social well-being are simply an inference and are not meant to be a direct measurement of social well-being or all encompassing. The text has been revised to clarify the measurement of social well-being.

A discussion is included in the Social Setting/Life-styles section on the traditional religious practices of Native Americans in the area and the necessity for uninterrupted solitude and other characteristics sought for the practice of their religion. There is also a discussion on traditional religious activities that occur in the Sweet Grass Hills on page 62 of the draft RMP.

For additional information and text revisions please refer to the Sweet Grass Hills section of Chapter 3 in the draft RMP/EIS and the Chapter 3 errata entry for page 76, column 1, paragraph 2.

Native Americans in Montana. In the future, I would hope to see that the BLM preparers of RMP EISs consider the values of all the inhabitants when they construct their measures of social well being and lifestyles.

Thank you for the opportunity to comment on this document.

Sincerely,

Sherri Deaver

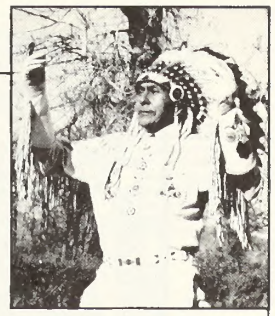
Sherri Deaver
Senior Ethnographer

cc. Curly Bear Wagner, Blackfeet Cultural Committee
Cynthnia Manning Hamlett, USFS
Jane King, Tetra-Tech
Marvin Keller, President MAA

Chief of The Blackfeet Nation

Earl Old Person, Chief

P.O. Box 486
Browning, Montana 59417
(406) 338-7521 or 338-7276



October 6, 1987

Mr. Wayne Zinne, District Mgr.
Lewistown District Office, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Zinne,

Although we missed the deadline for comments on the draft West Hi-Line Resource Management Plan, I hope that you will accept our late comment in the spirit of the government to government relationship which President Reagan has sought to develop.

The Sweetgrass Hills are a very important part of the religious and cultural heritage of the Blackfeet Tribe. Camping places there were used year after year. We hunted in these hills and used certain areas to teach hunting skills. Religious experiences were sought and received in these areas. We sold these lands in 1888 under great pressure because many of us were starving and we were told that the money from the cession would make us self-sufficient. The date of the cession became a bench-mark in our oral history. A recent study by your Agency suggests that there are over 4,000 cultural sites in the Sweetgrass Hills area. 143

The Blackfeet Tribe supports Alternative C, as it offers more protection for these important sites. The area should be segregated from mineral entry. The middle Butte should be included in the ACEC protected area. Our comments in our December 8, 1986 letter to you is the basis for our continued preference for Alternative C. 89

In addition, we would like to see included a provision for temporary area closures to enable our members to exercise their religious rights without interference. The Lewis and Clark Forest Plan does include a provision on this, so I am enclosing a copy of that page of the Forest Plan. 90

If you have any questions about our comments, please contact Curly bear Wagner, Director of the Blackfeet Tribal Cultural Program.

Sincerely,

Earl Old Person, Chairman
Blackfeet Tribal Business Council

enc.

No. 89

Under the proposed alternative, Middle Butte would be designated as part of the Sweet Grass Hills Area of Critical Environmental Concern.

No. 90

Your request to have temporary closures for traditional Indian religious practices in the Sweet Grass Hills will be considered in the Area of Critical Environmental Concern Activity Plan, which will be prepared following the approval of this RMP.

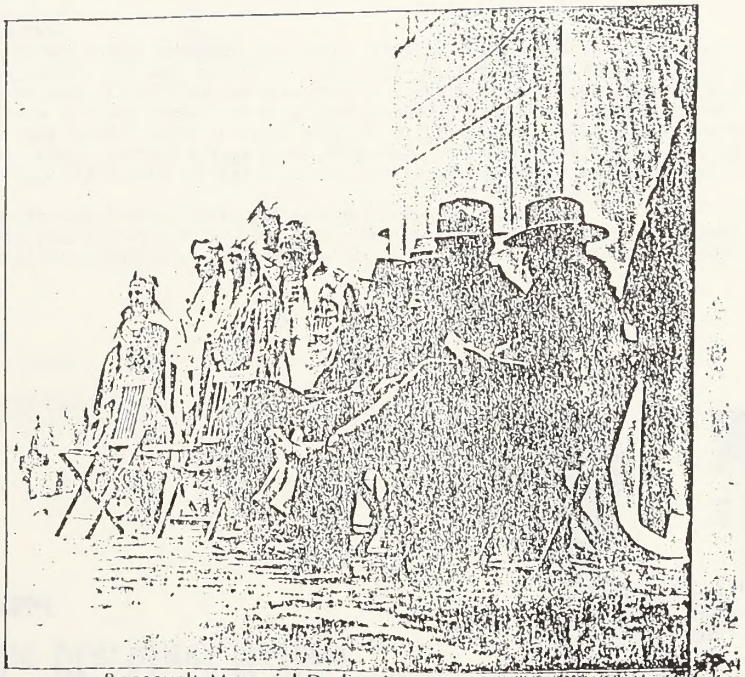
FOREST-WIDE MANAGEMENT STANDARDS

Human and Commu Development H-2

(3) Implement a special-use permit system for needed temporary area closures, to enable Native Americans to exercise their religious rights without interference.

(4) Expand Forest programs which promote employment for Native Americans.

(5) Consult with the Blackfeet Tribe regarding the establishment of proper procedures to implement the American Indian Religious Freedom Act. Using as a basis President Carter's 1978 Report to the Congress on that Act, the Forest Service will negotiate an agreement with the Blackfeet Tribe on this issue.



Roosevelt Memorial Dedication, 1931.

Forest-Wide Management Direction

51c

BLACKFEET NATION

P.O. BOX 850
BROWNING, MONTANA 59417
(406)338-7179

EXECUTIVE COMMITTEE

EARL OLD PERSON, CHAIRMAN
ARCHIE ST. GODDARD, VICE CHAIRMAN
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GEORGE KICKINGWOMAN
TED WILLIAMSON

December 5, 1986

DEC - 8 1986

Great Falls, Montana

Ms. Nancy Cotner
State Director
Bureau of Land Management
Great Falls Resource Area
P. O. Box 2865
Great Falls, Montana 59403

Re: West Hi-Line Resource Management Plan

Dear Ms. Cotner:

The Blackfeet Tribe considers the Sweetgrass Hills Area to be an important site for both religious and cultural resources. Spiritually, the Hills have been and continue to be the site of religious experiences for members of this Tribe as well as for Indians of other Tribes. Culturally, the Hills have been the site of battles and were regularly used for hunting as well as to practice hunting. We feel that the important of the Sweetgrass Hills to us merits their designation as a special management area.

Regarding your Table of Alternatives for the West Hi-Line Resource Management Plan, we offer the following comments:

1. The middle Butte of the Sweetgrass Hills should be included in the Resource Management Plan.

2. In general, the Blackfeet Tribe approves of Alternative C under the Sweetgrass Hills issue. We do however, feel that the use of the area for public recreation may cause privacy problems of those Indians seeking religious experiences. We definitely support your pursuit of a protective withdrawal from mineral entry.

3. We approve of Alternative C concerning revoking the Reclamation withdrawal of East Butte.

4. We approve of Alternative C under Land Tenure Adjustment. We hope that the Bureau of Land Management could acquire more lands in the Sweetgrass Hills area.

145

5. We approve of Alternative C regarding off-road vehicles. We believe the use of off road vehicles should be limited to designated roads and trails.

6. We approve of Alternative C regarding rights of-way; these should be avoided in the Hills area.

7. Regarding communication sites, we believe the communication site on Mount Royal disrupts our religious use of the Hills and should be removed.

8. We believe the Buffalo Jump site on Kevin Rim should be protected from pot hunters and others who would damage its cultural value, therefore we would in general agree with Alternative C on that issue.

91 We would like more information about the current mineral status of the Sweetgrass Hills, as well as some information about the procedure to withdraw it from mineral entry. We would appreciate being notified of any planned development in the Hills and would be willing to walk the land of any such proposed development as you prepare any site-specific analysis.

We continue to be interested in the protection of the site of our first Treaty signing at Judith Landing.

If you have any questions about our comments, please contact Curly Bear Wagner, Director of the Tribal Cultural Program.

Sincerely,

EARL OLD PERSON, Chairman
Blackfeet Tribal Business Council

EOP/tag

BUREAU OF LAND MANAGEMENT
Great Falls, Montana
DEC - 8 1986

No. 91

For information about the current mineral status in the Sweet Grass Hills please refer to the errata entries for page 45, column 2, paragraphs 1 thru 4; and page 64, column 1.

The general procedures for withdrawing public lands and interests therein can be found in 43 CFR 2310.1. A justification for withdrawing public lands from all forms of entry must exist. The West HiLine could become the justification and environmental analysis for withdrawal of the Sweet Grass Hills under Alternative C. If Alternative C was selected, then the procedures in 43 CFR 2310.1 would have to be implemented.

Public Meeting Havre, Montana July 13, 1987

Formal Statements

My name is Arthur Roth, from Big Sandy, and I fail to see how you can implement a management plan in these scattered tracts when the majority of the land is deeded land around those tracts. In reading that report I saw where
92 they said the crucial wildlife management areas showed all of the whole area as crucial for antelope, so the fact of the matter is, I wondered if you need to use the word crucial because all habitats are crucial and I don't quite see where very many areas are crucial compared with others.

My name is Mark Swinney, I'm with the BIA, Rocky Boys Agency, today, my comments I submitted to the NCRA but I would reiterate that the best plan in the world doesn't do much good without staff and funding, and I've observed that you fellows are in the same boat we are, we've got a lot of country to cover with little money and little staff, ant it's harder to implement plans without either one, which seems to me that this plan is typical of all bureaucratic plans - we don't get any money or staff. We've got good plans, but nothing to implement them with, and we need to get those things and get some people available to work with the ranchers more than one to every two or three hundred or something similar, and that's my comment over and over again.

No. 92

The only crucial antelope ranges on Figure 3.2 are delineated by a dotted line and are found in northern Liberty County, southern and northern Blaine County, and eastern Chouteau County. Crucial wildlife habitat is defined in the glossary as parts of the habitat necessary to sustain a wildlife population at critical periods of its life cycle. This is always a limiting factor on the population, such as breeding habitat, winter habitat, etc.

Public Meeting Havre, Montana July 13, 1987

93 1) Why didn't BLM schedule any public meetings to discuss the draft RMP on Indian Reservations? How were Native Americans consulted in the public input process?

94 2) What criteria did BLM use in the Draft RMP to identify public lands as suitable for disposal? Do you exchange acre for acre? Can BLM define the term small when used in land tenure adjustment? Is size one of the value factors used to identify tracts of public land for disposal? Why are some of the bigger tracts (2,000 acres) included in the disposal category?

95 3) How does the RMP handle the disposal of public lands? When BLM decides to proceed with the disposal of a tract of public land, is that tract listed or advertised?

96 4) Is the purpose of this plan to exchange land that isn't so valuable for land that is, and is accessibility to BLM land of primary importance? Is BLM trying to acquire public access to larger tracts of public lands, even if those tracts are identified for disposal? Could you get a right-of-way for public access to BLM land?

97 5) Do you have a preferred alternative?

98 6) If you decide to put a campsite on public land do you have to go through an Environmental Impact Statement? What level of planning is involved?

No. 93

The BLM scheduled public meetings in central locations to afford the most convenience for public attendance. The BLM has continually consulted with all Tribal Councils within the RMP area. This consultation has taken the form of briefings, letters and phone calls to the Tribal Councils throughout the planning process.

No. 94

The criteria used to select public land for disposal are listed in Appendix 1.1.

Land exchanges are based on appraised value rather than acre-for-acre comparisons.

BLM did not define the term small, as used in land tenure adjustment, instead resource values were evaluated against the criteria in Appendix 1.1.

Size is not one of the value factors used to identify public lands for disposal.

Large tracts of public land are identified for disposal if they met the disposal criteria in Appendix 1.1.

No. 95

Disposal of public lands can occur through private or state exchanges or public sale.

The public land sale can occur by competitive or modified competitive procedure. Public lands put up for sale are listed in local newspapers and the Federal Register. Sales can be direct sales to individuals if warranted. These sales are also listed in local newspapers and the Federal Register. The BLM would primarily use exchanges to accomplish public land acquisition and disposal rather than sale.

No. 96

A purpose of this RMP is to identify public lands that can be used to exchange for private or state land that would be in the public's interest to acquire.

Access to public land and private land with public values worth acquiring are factors considered when an exchange proposal is evaluated.

The BLM is not trying to acquire access to public lands that are suitable for disposal, regardless of size.

No. 97

Alternative D, as modified in this final, is the proposed alternative.

No. 98

All proposed developments on public land are analyzed for impacts prior to development. Developments which are not highly controversial or involve significant impacts (such as campsite development) are addressed in an environmental assessment, not an environmental impact statement.

99 7) You bring in money from minerals and grazing, how much do you bring in from recreation and how is this money spent?

100 8) On land exchanges and purchases, what does the plan propose for the mineral estate?

101 9) What kind of criteria were used in deciding which areas are open and closed for ORV use?

102 10) How will ORV use be enforced? Do you have the authority to enforce ORV use similar to the authority to issue trespass and enforce grazing rules and regulations?

103 11) How often do you do an RMP for an area?

104 12) How does Alternative D approach improving the condition of over utilized rangeland?

105 13) If you presently have a problem in management common, will that same problem carry into the new plan?

No. 99

Very little money is added to the federal treasury from fee collection for recreational activities on public lands in the RMP area. Commercial outfitters are charged a minimum of $50/year or 3% of their gross receipts, for a BLM permit. There are about 10 permitted outfitters per year. Map sales produce some revenue which is used to print additional maps.

Recreation fees collected by BLM are placed in the U.S. general treasury.

No. 100

BLM's policy is to avoid split estate situations. Each sale or exchange proposal would be evaluated on an individual basis because of the complexity of mineral ownership and mineral evaluations. Most sales and exchanges of the past have reserved the mineral estate for the federal government. Mineral estate can be disposed of for fair market value.

No. 101

Public interest for proper resource utilization, safety, and environmental protection would be used to determine the need for off-road vehicle use restrictions under the limited or closed designations.

For additional information please refer to the Off-Road Vehicle Issue Specific Criteria portion of Chapter 1.

No. 102

BLM enforcement of off-road vehicle designations is implemented through cooperation with off-road vehicle users, patrols and citation if necessary.

No. 103

RMPs are prepared to provide guidance for a period of 10-15 years. They are monitored and maintained yearly, and are reviewed every 5 years to determine if guidance is valid. New issues or outdated guidance may result in plan amendments or preparation of a new RMP.

No. 104

Previous direction for improving rangelands, through grazing management practices, has been provided in the Missouri Breaks Grazing Environmental Impact Statement and Prairie Potholes Grazing Environmental Impact Statement. The guidance from these documents has been incorporated in Management Common to All Alternatives.

The decisions resulting from these documents will continue to be implemented and monitored to determine the effectiveness of on-the-ground actions in achieving resource management objectives.

No. 105

Existing management guidance has been reviewed and valid guidance has been incorporated into the Management Common to All Alternatives section.

Public Meeting Great Falls, Montana July 14, 1987

106 1) When BLM sells a tract of land, where does the money go?

107 2) How does BLM define semi-developed and developed campsites when discussing the UMNWSR?

108 3) Under the preferred alternative, what is the most extreme type of concession development that could be allowed? Is it possible that I could find a KOA by some BLM land?

109 4) Under the preferred alternative what type of development would be allowed at interpretive sites along the UMNWSR? What sites along the UMNWSR qualify for interpretive development? Does BLM interpret KOA campground type of concession development, allowed in the preferred alternative as consistent with Wild and Scenic River Areas, under the Act? Could the BLM produce and distribute the floaters guide as an alternative to constructing interpretive signs along the UMNWSR?

110 5) How does the draft RMP address noxious plant management?

111 7) Where could this concession development occur along the UMNWSR?

No. 106

Finances from the sale of public lands in Montana are distributed as follows: 4% to states and counties; 20% to the general fund; and 76% to the Reclamation Fund.

No. 107

Semi-developed sites are those with some capital improvements and camping use is fairly frequent.

Developed sites are those areas with tent or trailer spaces, potable water, access roads, refuse containers, pit or chemical toilets, and qualify for fee collection under the Land and Water Conservation Act of 1965.

No. 108

Developments permitted on BLM-administered land would be determined by need (demand) and economic feasibility. Under the proposed alternative, private sector initiatives such as a KOA campground would be allowed if they meet these criteria.

No. 109

Self-guided interpretive study development may be allowed at appropriate geological, historical, cultural, paleontological or natural areas. This development may include interpretive signs and displays. Sites which could be developed include: Stafford Ferry, Cow Creek, Evans Bend, Steamboat Point, Little Sandy, and Hole-In-The-Wall. Other sites may be added as needed.

Private sector initiative, such as a KOA campground could be considered if there is need (public demand) and it is economically feasible. The proposed alternative states that these developments on public land would be permitted only in recreational segments of the river and must be consistent with the Wild and Scenic Rivers Act, as amended.

A Floater's Guide is available and has been used extensively as an interpretative tool. However, it can't address all the specific data on the numerous resources of the river ecosystem. This void could be filled with interpretative techniques such as signs.

No. 110

The BLM will control and/or eradicate noxious plants on public lands administered by BLM under cooperative agreements with county weed boards. If weed problems occur in a checkerboard ownership pattern the BLM will initiate control measures in conjunction with other landowners.

For additional information please refer to the Grazing Management Implementation (vegetation related) portion of Chapter 2 of this document.

No. 111

Such developments could occur only in the Recreational segments of the UMNWSR. These segments are shown on Figure 3.8 in the Draft document.

112 8) Does BLM envision private concessionaires assuming some of the river management duties (currently your river rangers are volunteers or employees)? Are there existing concessionaires? What would a concessionaire get in return for doing this?

113 9) What services could concessionaires provide and would they collect fees from the public? Would you compensate them for taking on river management?

114 10) Is there currently a no wake speed restriction in the recreational segments of the UMNWSR? Where are the recreational segments of the river?

115 11) How does the preferred alternative propose managing the Marias River? Does the BLM have some land along the Marias River? How can the public find these lands?

116 12) How does the preferred alternative handle logging in the Sweet Grass Hills? Does this alternative protect the watershed in the advent of an active logging program? What is the current level of logging activity in the Sweet Grass Hills?

No. 112

BLM would continue its administrative responsibilities however, private sector initiatives could provide some visitor services. River outfitters permitted by BLM are considered to be concessionaires. The concessionaire would profit financially from service fees.

No. 113

Private sector initiatives could be used to provide a wide variety of services. These services could include providing supplies or major lodging facilities. Services would depend on need and economic feasibility. BLM would have the option of compensating private sector initiatives on a case-by-case basis. An example might be contracting for litter pickup.

No. 114

Only wild and scenic segments of the Upper Missouri National Wild and Scenic River have a no-wake restriction, not recreational segments. Figure 3.8 of the draft RMP shows recreational segments of the river.

No. 115

The proposed alternative identifies the Marias River as an acquisition area, limits off-road vehicle use on public lands along the Marias, and requires BLM to participate in developing instream flow recommendations.

BLM does administer some land along the Marias as identified on Map 1 in the back of the draft RMP.

The map is a good method for the public to locate public lands however, most of the public tracts along the Marias are unsigned and don't have legal or physical access.

No. 116

There is currently no logging on BLM lands in the Sweet Grass Hills and this area is not considered commercial forest land by the BLM.

The proposed alternative may allow the negotiated sales of forest products in the Sweet Grass Hills. The possible sale of forest products will be addressed in an activity plan.

Stipulations to protect resources, including the watershed, would apply to any timber sale which might occur.

117 13) How does the RMP address water quality with respect to mining activity? Do you test for water quality before any activity takes place?

No. 117

Mining and other surface disturbing activities generally impact water quality and quantity both on the surface and subsurface. The degree of the impact depends on several factors such as location, type, and extent of the disturbance and the stream or aquifer being disturbed.

Federal regulations have set limits above which degradation of water quality and quantity cannot occur. The State of Montana regulations are even more stringent, not allowing degradation of water quality or quantity off the disturbance or mine site. BLM would develop mitigation measures to ensure the Montana regulations for water quality and quantity could be maintained prior to approval of a plan of operation.

The Montana Water Quality Act and the Metal Mine Reclamation Act require mine permittees to characterize (test) existing surface and ground water conditions before mining activity begins. The Water Quality Board and BLM determine the types and level of characterization based on the type, level and location of the mining activity.

For more information please refer to the Monitoring and Evaluation section of Chapter 2.

118 14) What restriction does the preferred alternative impose on ORV use of the UMNWSR corridor? Do those restrictions change among management segments?

No. 118

The proposed alternative states that off-road vehicle use would be confined to designated road and trails all yearlong in the river corridor, regardless of the type of river segment classification. Those roads and trails would be identified in an off-road vehicle implementation plan that will follow the approval of the RMP.

Public Meeting Shelby, Montana July 15, 1987

Formal Statement

My name is Mickey Fulp. I am a geologist with Santa Fe Pacific Mining. We are located in Albuquerque, New Mexico. We are a subsidiary of the Santa Fe Southern Pacific Corporation which you may know better as the Santa Fe and Southern Pacific Railroads.

Since 1984 I have served as Project Manager for Santa Fe on our Sweet Grass Hills exploration joint venture with Lehmann and Associates out of Minneapolis, Minnesota. Since I am a geologist I will restrict my comments tonight to mineral resources of the Sweet Grass Hills area and the benefits of developing them.

Santa Fe will provide more detailed written comments to the BLM before the comment closing date. Our joint venture presently controls approximately 3600 acres of patented and unpatented mining claims, state leases and private leases in the Sweet Grass Hills. Our latest results have brought more focused attention to the Tootsie Creek area, East Butte. We have identified three areas with gold mineralization of tenorite to constitute ore. We are presently testing the continuity and size of these deposits.

The project is still in its initial exploration stage yet since the fall of 1984 Santa Fe Pacific Mining has spent over $500,000.00 on the program. The economic benefits to Liberty and Toole counties has been substantial mainly through goods and services purchased by our exploration crews. In addition, we have employed a local contractor for most of our road construction and pay substantial rentals and advance royalties thru our private lessors.

The draft resources management plan environmental impact statement for the West HiLine area is of deep concern to Santa Fe Pacific Mining. We do not believe the BLM's preferred alternative best serves the people of the region or the people of Montana. We feel the only viable alternative is alternative A which would continue with the present management program for the area. Current State and the BLM regulations provide stringent construction and reclamation stipulations on all exploration,excavating and development activities.

119 I find it somewhat amusing that one of the four reasons for the BLM's so called preferred alternative is the Sweet Grass Hills are an historic hardrock mining region.

120 The preferred alternative of the BLM would have a significant negative impact on the mining industry. We have already felt this negative impact in that our recent 1987 exploration proposal has been delayed pending appeal of our 1986 plan. The preferred alternative would complicate our process of permitting drastically.

121 We are also concerned with the lack of notification of mining claim holders of record in the planning process. The BLM maintains files in Billings documenting all valid mining claims in Montana, yet of the major claim holders in the area none that we know of, and this includes Santa Fe Pacific Mining, Lehmann and Associates, Utah International, American Copper and Nickle, and Archaeon Mining, were officially notified of the proposed plan.

No. 119

The reference to historic hardrock mining has been deleted as a reason for Area of Critical Environmental Concern designation. BLM did not mean to imply this was a reason for designation, but only meant to acknowledge that there has been historical as well as current mining use.

No. 120

BLM agrees that the proposed alternative will have a negative impact on the mining industry. However, BLM does not feel it will be a significant negative impact (long-term and lasting in effect). The Bureau feels the impacts of this alternative on the mining industry would be a moderate negative impact (short-term and temporary in effect). This is due to the requirements of filing a Plan of Operations, where a Notice previously sufficed, and waiting for formal approval of that plan. The BLM will be required to comply with the time frames (generally 30 days) outlined in 43 CFR 3809 for approving a Plan of Operations.

The delay experienced in your 1987 exploration program is a result of an appeal filed on the 1986 approval. This occurred under the current management practices (Alternative A). This appeal, and the subsequent delay of your 1987 exploration program would have occurred no matter which alternative was in place.

No. 121

Please refer to response No. 13.

122 We feel the draft is inadequate in addressing the geology and mineral resources of the Sweet Grass Hills. Geologically the Sweet Grass Hills are strikingly similar to major gold mining areas in central Montana. Some examples would be Zortman-Landusky in the Little Rocky Mountains, Kendall Mine in the Moccasin Mountains, and the Spotted Horse-Gilt Edge Mines in the Judith Mountains. In addition the Sweet Grass have striking geologic similarities to the most famous gold mining area in this country and that's Cripple Creek Colorado. Numerous gold and silver occurrences are known in the Sweet Grass Hills and occur on west, middle, east and grassy buttes. Only a few of these were documented in the draft EIS. The following known occurrences were not even mentioned. At West Butte there were patented mining claims. At Grassy Butte is the site of present exploration drilling. An active gold placer mining operation has been ongoing in the Middle Butte area for several years. None of these occurrences were documented in the draft EIS. The report does not address at all recent exploration activities, potential for hosting major mineral deposits, and the benefits of mineral development to local economies. Santa Fe Pacific Mining feels a likelihood of finding mineable gold deposits in the Sweet Grass Hills both of the underground or surface mining character extremely high, with mock resource potential exceeding one million ounces of gold. At present prices that one million ounces of gold would be worth $450,000,000.00.

123 The report is inadequate in that no data is presented on the economic benefits of exploration to local communities and future benefits should development occur. I have already briefly mentioned Santa Fe's exploration activities and direct benefits to the towns of Shelby and Chester for the last 3 years. Before any development could occur an additional 2 to 5 million dollars would be spent on exploration. I found it interesting to note that the BLM administers approximately 625,000 acres within the West HiLine study area within an area total of 11,285,000 acres of land. Compare this with the average surface gold mine mill complex which occupies less than 100 acres.

Now I would like to give you some facts and figures on gold mining. We're going to take this average size hypothetical surface gold mine. It will occupy less than 100 acres, it's development costs will range from 10 to 20 million dollars. It will employ 75 to 100 people, mostly hired from a local labor force. This would include people all the way from electricians to secretaries. It will have an annual payroll of 1.5 to 2.5 million dollars, and it would provide numerous indirect jobs. Some economic planners say 3 to 4 indirect jobs for every person employed in the mine to supply goods and services in the towns in which these people live. And it would substantially increase the state and local tax base. I think you can see from this that such a mineral development would have a strong positive affect on the economy of the local towns.

In summary, Santa Fe Pacific Mining supports Alternative A which would continue present management policies in the Sweet Grass Hills. We feel that present state and federal regulations adequately protect the areas with stringent construction and reclamation stipulations. The BLM's preferred alternative would have a significant negative impact on the mining industry.

In addition the draft EIS has not adequately addressed the high mineral resource potential of the area both surface and underground mines and the economic benefit of the exploration and development to local and state economies.

I thank you for listening and if you have concerns over the economy of the West HiLine area I ask that you consider our position in hopes that you lend your support. Thank you.

No. 122

Please refer to response No. 9.

No. 123

Please refer to response No. 15.

Public Meeting Shelby, Montana July 15, 1987

124 1) Under Alternative D will mineral exploration become more complicated? Will mining activity be more stringently controlled and will reclamation activities be more complex? Will mining activity require an EIS?

125 2) Under Alternative A what are the requirements if mineral activity is less than five acres? Do you have to file a notice of intent and does the BLM complete an environmental analysis?

126 3) For the practice of traditional religion under the American Indian Religious Freedom Act, do Native Americans have to identify and verify specific religious sites?

127 4) The map for the West HiLine Resource Management Plan, pertaining to the Sweet Grass Hills, has a lavender colored area. Does this area represent the ACEC acreage of 6950 acres or the management zone acreage of 17,500 acres from Table 2.5 page 34? Is there any provision in the EIS that would lend itself to an expansion of the management zones to Federally managed subsurface? Is the RMP meant to manage those explicit areas pertaining to the Sweet Grass Hills?

No. 124

The proposed alternative would designate the Sweet Grass Hills as an Area of Critical Environmental Concern. In this Area of Critical Environmental Concern a proponent would be required to submit a Plan of Operation and receive formal BLM approval before conducting activities on BLM-administered lands, regardless of the acreage to be disturbed. Special stipulations may be applied on a case-by-case basis. The additional time frames and review under the proposed alternative may allow impacts from specific proposals to be more accurately assessed and mitigating measures developed before problems occur.

In the portions of the planning area not designated an Area of Critical Environmental Concern, an operator may proceed 15 days after notifying the BLM of his intentions for projects less than 5 acres under the current management alternative. Mining and reclamation standards will remain the same, namely whatever is necessary to prevent unnecessary and undue degradation.

All Plans of Operation are evaluated under the National Environmental Protection Act to assess the impacts and identify the stipulations needed to prevent unnecessary and undue degradation. An environmental analysis is used to evaluate most actions; however, an environmental impact statement is required where significant impacts or a high level of controversy are expected.

No. 125

Locatable mineral activities (excluding casual use) disturbing less than 5 acres require the filing of a Notice with the BLM District Office under the current management alternative. This Notice must detail how and where activities would be conducted and must be filed at least 15 days before surface disturbing activities begin.

The BLM screens this Notice for potential conflicts with threatened and endangered species, cultural, watershed, soils etc. There is no formal approval or disapproval and no federal action taken, nor is there a formal environmental analysis prepared. However, if a Notice reveals that the activities to take place would cause unnecessary and undue degradation, steps are taken to correct the operation or stop the project.

No. 126

American Indians do not have to "identify and verify" specific religious sites to practice their traditional religion under the American Indian Religious Freedom Act.

Please refer to the Implementation of Traditional Cultural Values portion of Management Common in Chapter 2 for additional information.

No. 127

The lavender colored area on Map 3 has been revised to represent the Area of Critical Environmental Concern boundary. The use of management zones is no longer proposed in the RMP. The proposed alternative could apply special stipulations to mitigate impacts to raptors within the raptor habitat area delineated on the maps in Appendix 2.2.

Management guidance for the Sweet Grass Hills is located under the Emphasis Area discussions in Chapter 2. Additional guidance can be found under each resource in the Management Common to All Alternatives section of Chapter 2.

128 5) What is going to happen to those lands that have been identified for disposal? Will a lease on those lands continue to its expiration and will there be a renewal offered? How would a sale of public land be accomplished? Will the permittee of a grazing lease be reimbursed for improvements if the lands are exchanged or sold?

129 6) Would the ACEC management zone, on private surface and federal subsurface, constitute a zoning which would restrict private surface rights and entitle owners to just compensation?

130 7) What are the BLMs responsibilities when mining activity occurs on private surface and federal subsurface? What happens if a peregrine falcon or red tailed hawk nest is located in the area?

131 8) What are the BLMs responsibilities if somebody wants to drill an oil and gas well and you find a hawk or an eagle nest?

132 9) What areas can Native Americans claim for traditional religious practices?

133 10) Has the BLM done any studies of the relative cost of managing by Alternative A versus Alternative D, and what would those comparative costs be? Where is the increase in funding going to come from to manage the preferred alternative which is more management intensive? How will this affect mine permits if you don't have the personnel required to do the necessary clearances?

No. 128

Public lands identified for disposal would be managed under the guidance of the RMP until disposed of. Current authorizations and renewals will continue until disposal occurs. After disposal, BLM no longer has any management involvement.

Sales of public lands can occur through a competitive, modified competitive, and direct sale process. All types of sales are listed in local newspapers and the Federal Register. The sale and grazing regulations do allow for the grazing lessee to be reimbursed for improvements.

No. 129

The management zone concept has been eliminated. Please refer to response No. 32.

No. 130

The BLM has no regulations or permitting requirements for hardrock mineral activity occurring on private surface. Such activity is regulated by the Montana Department of State Lands.

No. 131

Raptor protection measures for sensitive or threatened and endangered species, contained in the standard oil and gas lease stipulations (Appendix 2.2), limit surface occupancy to no closer than 1/4-mile from an occupied nest. The proposed alternative would implement the Rocky Mountain Front Raptor Guidelines in the Sweet Grass Hills and Kevin Rim Areas of Critical Environmental Concern (Appendix 2.2). In most circumstances an operator, would have two options: (1) they could relocate the well; or (2) they could wait until the nesting raptors leave before beginning surface disturbing activity at a closer proximity than the 1/4-mile limit.

BLM's responsibility is to ensure that the oil and gas lessee is provided the opportunity to develop the lease while also ensuring that raptors and their habitat are not compromised in the process.

No. 132

Please refer to response No. 126.

No. 133

An analysis of each alternative was completed based on the management intensity by planning issue. The current funding level would be adequate to implement the No Action Alternative. Alternative B would require a 3 to 5% increase and Alternatives C and the proposed alternative would require 5 to 10% increases.

Funding levels would affect the time and implementation of management actions over a period of 10 to 15 years, but would not affect resource allocations made under this RMP.

134 11) What brought on the new management plan and the need for it? Why the need for all the changes when Alternative A seemed to work quite well?

135 12) I have not seen designated trails on 98% percent of the BLM land. What is the interpretation of an allowable trail for off road vehicle use?

136 13) Page 87 deals with 529.67 acres that would be opened up to mineral entry in East Butte. Is this located on a map and where is it designated in the RMP?

137 14) When the BLM exchanges or sells public land, what happens with the mineral rights?

138 15) Is a mining company required to reclaim an area under Alternative A?

139 16) Are the professionals settling for something that is less than adequate under the preferred alternative?

No. 133 cont.

The annual BLM budget process would set funding and workload priorities. If BLM staff are not available to do the clearances, other options including: assistance from other agencies, private contracting, or requesting the company to supply the information may resolve the budget/staff deficits.

For additional information and text revisions please refer to the Budget Assumptions section in Chapter 2.

No. 134

Existing planning documents were found to be outdated and no longer useful. The West HiLine RMP/EIS was developed, incorporating valid guidance from previous plans when possible, to address current issues and concerns.

No. 135

The Lewistown District currently does not have any trails designated solely for off-road vehicle use. Off-road vehicles may use any area or trail not designated as limited or closed. Use in limited areas is subject to the restrictions applied.

A trail with use restrictions would be posted with applicable stipulations.

Please refer to Chapter 2 of this document for designations under each alternative.

No. 136

The area involving the lands withdrawn to the Bureau of Reclamation in East Butte is shown on page 63, of the draft RMP. This management action is identified in Chapter 2 under the Emphasis Area discussion for each alternative.

No. 137

Please refer to response No. 100.

No. 138

Reclamation is required for hardrock minerals activity under all alternatives. Reclamation is governed by 43 Code of Federal Regulations (CFR) 3809.

No. 139

The BLM feels that the proposed alternative presents an overall balance for managing the public lands under BLM's multiple use mandate, which precludes the selection of an alternative strongly favoring one resource over another.

140 17) Who made the decision that the preferred alternative is Alternative D? How was this decision made? Is Alternative D the final plan with some necessary alterations based on public input? Who makes the decision on the final plan and has that decision already been made?

141 18) What happens if the public prefers Alternative A? Is public input only from within the state or from all over the country?

142 19) How was the public notified about the draft RMP? How come mining claim holders were not notified?

No. 140

BLM managers reviewed the analysis of the alternatives for: 1) effectiveness in resolving planning issues; 2) conformance with the guidance established by the planning criteria; and 3) avoidance of unnecessary impacts to the human environment.

Based on the above criteria, the preferred alternative (Alternative D) was presented to the public as a balanced management strategy for public lands and resources. The preferred alternative has been modified to reflect the public review process. Public comments and an evaluation of the alternatives against the criteria listed above led BLM to select the proposed alternative in the final RMP.

The BLM will issue a Record of Decision identifying the final plan following distribution of the proposed final RMP and allowing for a protest period. If a protest is received, the BLM can issue an ROD for that portion of the plan not under protest, pending a decision on the protest, or defer the ROD until after resolution of the protest. The Montana State BLM Director authorizes the final plan.

Additional information on this subject can be found in the Selection of the Proposed Alternative section of Chapter 2.

No. 141

BLM has considered public participation and opinion in all issues and has modified its preferred alternative.

Public opinion is solicited and considered from all interested U.S. citizens, organizations and agencies.

No. 142

Please refer to response No. 13.

Public Meeting Chester, Montana July 16, 1987

Formal Statement

My name is Fred Jenkins, I am exploration manager for Santa Fe Pacific Mining and I represent our company on the statement I wish to make here this evening. We have been working here in the Sweet Grass Hills particularly focused lately on the East Butte area since about 1984. As of the end of this next week we will have spent close to a half million dollars in an effort to locate an economic gold deposit.

We come with some credentials I think from an environmental standpoint. I need to bring this up briefly because what we feel is unfair in the Alternative D is the designation of the area of critical environmental concern. We ourselves have been, I think, very thorough in our handling of environmental matters, and as a matter of fact, we have received endorsements from the New Mexico Wilderness Coalition testifying to congressional committees on our behalf in the way we have operated in the past as well as the National Parks Conservation Association. This has to do with work we have done on WSA areas and other work we have done in the southwest.

So our main concern is with the policy under Alternative D of identifying the area of critical environmental concern. We don't believe that is justified in giving the fact there is no known proven habitat that's going to involve an endangered species nor is there a problem with nesting birds. There is only a future proposed program upon which we have no solid backing. We feel that the work we have done has shown solid evidence and supports the already admitted statement of the BLM that there is good mineral resource potential there, and especially in our case in gold.

We have focused in as I said, in the East Butte area and we recognize the conflicts that are there, but we believe that the current management technique, the multiple use concept in Alternative A would best suit the problem of addressing that. We see no advantage in Alternative D except that the ACEC would further make it more difficult to operate a mining venture. Yet, it would only slow things down and cause more expense, in the bottom line it is going to be all of us that pays for that.

So our basic statement is that we feel that the State and Federal regulations would adequately protect the areas as they've been defined and we support Alternative A in that respect.

Public Meeting Chester, Montana July 16, 1987

143 1) What is the difference in reclamation between Alternatives A and D, for example in mining? What about getting a permit to do disturbance, would it be the same between Alternatives A and D?

144 2) Is the whole area (West HiLine) going to be designated under the same Alternative?

145 3) Is there a large open pit mining operation foreseen for the Sweetgrass Hills? Could it reduce big game habitat?

146 4) Where is the 529 acres of withdrawl land that you want to open to mining? Isn't it inconsistent to open this area up to mining and designate the area an ACEC?

147 5) Did BLM permit and approve the mining road into Devil's Chimney in the Sweet Grass Hills? Will the road be reclaimed? Do you control access on roads open to mining or can the public drive on that road? Can you control access for the purpose of protecting wildlife habitat?

No. 143

The reclamation standards are intended to prevent unnecessary and undue degradation of federal lands and resources. This standard applies under all alternatives. Disturbance has to reach a 5-acre threshold before a formal permit is required under Alternative A.

An approved Plan of Operation is required for all surface disturbing activity within designated Areas of Critical Environmental Concern (Kevin Rim, Sweet Grass Hills and Cow Creek), except casual use under the proposed alternative.

Each alternative would apply the unnecessary and undue degradation requirement to every plan of operation filed.

No. 144

BLM's proposed alternative, including the Management Common to All Alternatives guidance, would be implemented throughout the planning area.

No. 145

BLM has no mining Plans of Operation authorized, or pending, for a large open pit mine in the Sweet Grass Hills. If one was proposed, the environmental analysis would address potential impacts to big game habitat. Reduction in big game habitat would depend on the magnitude and duration of such an operation and the mitigating measures which would be applied.

No. 146

The location of the withdrawal is shown on Figure 3.6 (on page 63 of the draft).

The purpose of the Area of Critical Environmental Concern designation in the proposed alternative is not to preclude mining from the area. The BLM would continue multiple use management in the Area of Critical Environmental Concern with a management emphasis on protecting the resources for which the area was designated.

BLM's review of the withdrawal has indicated that 529.67 acres is no longer needed by the Bureau of Reclamation for the stated purpose. Therefore, BLM has recommended revocation of the withdrawal. The revocation would reopen the lands to the public land laws, including mineral entry. Since the majority of the Area of Critical Environmental Concern would remain open to the mineral entry, it is consistent to reopen these lands. The location of the withdrawal is shown on Figure 3.6 on page 63 of the draft.

No. 147

BLM did permit exploration work in the vicinity of Devil's Chimney on June 23, 1986. One of the conditions of approval was that the roads and drill sites be reclaimed when work is completed. A reclamation bond is being held by the Montana Department of State Lands.

Roads constructed on public lands are generally open to the public, while they are in existence; unless this use puts public health and safety at risk, or substantially interferes with the purpose for which the road was constructed.

Mitigation restricting access can be developed to protect wildlife habitat or other resources if the environmental analysis indicates these measures are necessary.

148 6) Are the 529 acres of withdrawal land part of the area already open to mineral exploration?

149 7) What are your standards for reclamation on a road like the one into Devil's Chimney?

150 8) How much in royalties are received from locatable mining? What will the private surface owner receive in an area with federal minerals and a mining operation?

151 9) Does BLM require an environmental assessment on mining projects? Is there public input into an environmental assessment?

152 10) What is the acreage of federal surface with federal subsurface for East Butte of the Sweet Grass Hills?

153 11) What protection will Alternative D provide ranchers with private surface over federal subsurface acreage in the event of a mining operation?

No. 148

The 529.67 acres are part of the 569.67 acres currently withdrawn by the Bureau of Reclamation which are not open to mining. Removal of the withdrawal would open that portion to mineral entry, unless those lands were subsequently withdrawn. This withdrawal is within an area that is open to mineral exploration. A review of the current withdrawal recommended that all but 40 acres be returned to public land status and opened to mineral exploration.

The map on page 63 of the draft RMP/EIS shows the general location of this area. For additional information please refer to response No. 136 and No. 146.

No. 149

The standards for road reclamation are to: replace the sidecast rock and soil, regrade the road to approximate the original contour, and reseed with an approved seed mixture at the prescribed rate.

The bond is not released until a self-sustaining stand of vegetation has been established and the stability of the reclaimed roadbed is to BLM's satisfaction.

No. 150

There are no federal royalties on locatable mineral production. In Montana, there is a State Metaliferous Mines Tax with a variable tax rate ranging from 0 to 1.5% of the gross produced value.

The private surface owner is entitled to compensation for damage to his surface and improvements, but no royalties or comparable income.

For more information please refer to response No. 130.

No. 151

All Plans of Operation permitted by the BLM must meet National Environmental Policy Act of 1969 (NEPA) requirements, which include that each action be analyzed and an environmental document be prepared, filed, and be available to the public. This process may involve public participation which is determined by the significance of impacts and level of controversy expected as a result of of the proposed action.

No. 152

There are 4,760 federal surface acres and 13,305 federal subsurface acres in the East Butte area.

No. 153

The alternatives do not affect private surface. For additional information please refer to response No. 130.

154 12) Is Alternative D going to give you more control over mining in the ACEC areas versus Alternative A or does the 1872 mining law oversee mineral development?

155 13) What are you doing to control access in the Sweet Grass Hills? How will this affect our plans to make this a walk in recreation area? How will BLM control the damage to public and private lands?

156 14) Can you keep ORVs off of existing or future mining roads?

157 15) What is considered a trail on BLM land for ORV use?

158 16) How much private and public surface is there in the Devil's Chimney area?

159 17) What type of fire protection do mining companies have to provide?

No. 154

The 1872 Mining Law applies to all alternatives. If impacts can be mitigated and do not cause unnecessary or undue degradation, the BLM must approve a mining Plan of Operation.

No. 155

The Sweet Grass Hills would be given a limited off-road vehicle designation in the proposed alternative, which would restrict use to designated roads and trails. The intent is to eliminate cross-country motorized travel with access only on existing routes. The activity plan will further define limitation with regards to time of year and type of vehicle restrictions.

Continued multiple use under the Area of Critical Environmental Concern designation would permit a varied public use, but most of it should be confined to designated roads-trails identified in an off-road vehicle plan and identified in the field by signs. Some public and private off-road vehicle trespass may occur.

The specific details of a walk-in recreation area would be addressed in the activity plan that would be prepared for the Area of Critical Environmental Concern.

No. 156

A temporary restriction or closure can be put into effect if use of an existing mining road is dangerous to the public. This would be assessed on an individual basis. Future mining activity and associated roads would be addressed during review of the mining permit and Plan of Operations.

Please refer to Response No. 147 for additional information.

No. 157

The BLM has no routes identified or built as trails for off-road vehicle users. The term roads and trails is used generically to cover all possible access routes. A biker could use a cow trail or go cross country if the area is designated as open. Travel would be restricted to access routes if an area is designated limited to existing roads and trails.

An off-road vehicle trail is a route that accommodates one or two wheeled motorized or mechanical vehicles.

No. 158

Devils Chimney is located on the East Butte. The BLM manages 4,760 acres on East Butte.

No. 159

The operator must comply with all applicable federal and state fire laws and regulations and shall take all reasonable measures to prevent and suppress fires in areas of operation.

Any fires they cause which require BLM suppression action, will be billed to the mining company to recover BLM's costs. This is for man-caused fires only.

160 18) What are the standards for water quality on and around mining activity? Is there any testing before mining activity begins?

161 19) Has the decision already been made that Alternative D is what you are going to do?

162 20) Do you have the discretion to deny opening the 529 acres to mining?

163

163 21) Why doesn't the BLM outline policies for ORV use in the Sweet Grass Hills?

164 22) How much and what type of mining activity can occur in the Sweet Grass Hills? Can a mining company go back into the mountain and remove the hills? Can they level the hills and just replace it with grass?

No. 160

The Montana Department of State Lands is responsible for ensuring that mining activity does not degrade water quality, unless a waiver is granted, based on necessary economic or social development. A waiver may not be granted if present and future uses of the water would be adversely affected. A public hearing is required for a waiver.

Operators are required to document existing surface and ground water conditions prior to mining activity. BLM and the State Water Quality Board would determine the type and level of characterization. Testing may or may not be required, depending on the type, level and location of the mining activity.

No. 161

Please refer to response No. 140.

No. 162

The 529.67 acres are segregated from mineral entry as stipulated in the withdrawal of these lands to the Bureau of Reclamation. Removal of the withdrawal would reopen these lands to mineral entry, unless another withdrawal segregating mineral entry were initiated. The proposed plan would allow mineral entry after removal of the withdrawal.

No. 163

Off-road vehicle designations have been identified for each alternative in Chapter 2 (under issue No. 2, Off-Road Vehicle). The proposed alternative designates off-road vehicle use in the Sweet Grass Hills as limited to designated roads and trails. Additionally, seasonal restrictions to off-road vehicle use of designated roads and trails would apply in crucial wildlife areas. An activity plan would be prepared to address specific restrictions prior to implementation.

No. 164

There are no set restrictions on what method of mining an operator may employ. The type of mining, open pit or underground, depends on the grade and configuration of the ore body. The government assumes the operator knows best how to develop a mineral deposit and merely evaluates the proposal to identify unnecessary and undue degradation.

If environmental analysis of a specific proposal indicates it would cause unnecessary and undue degradation, the operation is not permitted. The operator may elect to change the mining method to reduce impacts to a level that does not cause unnecessary/undue degradation.

As for an operation that would go in and level the Sweet Grass Hills, we have no indications of any mineral deposit that would justify such measures. Given what is known about the mineral potential of the area such a scenario is extremely unlikely.

165 23) On page 32 Alternative D, what is proposed for the one square mile of intensive ORV use and where is it proposed for?

166 24) What is involved with obtaining a mining patent?

167 25) Can a mining company cross private property to get to a federal claim?

168 26) Under Alternative D, why did you specify Native Americans would be notified of mining activity in the Sweet Grass Hills and not other organizations? What tribes use the Sweet Grass Hills for religious purposes?

169 27) Is there much ORV use on BLM lands which don't have legal or physical access?

No. 165

The intensive off-road vehicle use area, identified in the proposed alternative, is an option which may be developed if sufficient interest is indicated. The intensive use area would be located in an area designated open to off-road vehicle use and in an area which meets the criteria outlined in Chapter 2. Identification of a specific location will not occur until BLM receives sufficient interest.

No. 166

A mining claimant may apply for patent after doing $500 worth of development work on a claim. It is then examined to verify the discovery of a valuable mineral, as defined under the mining laws. If there are no contests, then a patent is issued.

No. 167

A claimant may not enter private surface/private minerals without permission from the landowner. In areas where the mineral estate is owned separately from the surface estate, the mineral owner has certain surface rights. Mineral rights generally include surface use for purposes of access, exploration, development, mining, ore dressing and transportation operations. However, the surface owner is entitled to compensation for damage these activities cause to the surface and improvements.

No. 168

Under the American Indian Religious Freedom Act, a federal agency is obligated to consult with local Native American groups when actions may affect an identified religious site or area. The Sweet Grass Hills have been formally identified as a Blackfeet and Chippewa Cree Indian traditional religious area. They are also known to have been used by the Gros Ventre, Stoney, Blood and other tribes for vision questing activities.

No. 169

During the fall there is some off-road vehicle use on such lands, but actual use numbers aren't known.

Public Meeting Lewistown, Montana July 20, 1987

Formal Statement

My name is Dick Knox, I am president of the Missouri Breaks Multiple Use Association, and I speak here tonight on behalf of that organization. Our association is composed primarily of farmers and ranchers from Blaine, Fergus, Chouteau and Phillips Counties, we are the people who will be most directly affected by this proposed management plan. We do have some concerns and I will try to address them specifically tonight. First let me say that we truly believe in what the name of our organization implies, we believe in true multiple use of these federal lands we are discussing tonight. These uses include not only grazing and mineral development they include hunting, fishing, floating and other outdoor pursuits too numerous to mention. Taken together this wide range of commercial and recreational activities comprise true multiple use of not only the Missouri Corridor, but all Federal lands in the study area. We're here tonight to discuss the management for the next 10-15 years, hopefully it will stay as close to multiple-use management as is now the case.

Our organization can support Alternative D with these qualifications of riparian habitat.' We love the cottonwood groves too, and recognize they are not regenerating as they should for the enjoyment of future generations. We would point out that completely fencing groves will be disruptive to ranchers with grazing permits. Livestock need shade during hot weather and complete fencing would be very detrimental, also fencing large groves will disrupt cattle movement to water and concentrate them heavily in other areas, creating problems that do not now exist. We could not support such a policy. We recommend that if such a policy is instituted that it provide for:

1. leaving a portion of all groves unfenced, the portions of the groves could be rotated to provide for reestablishment of the entire grove.

2. large and particularly long areas of groves be segmented to provide for normal cattle movement to water.

Our next area of concern is right-of-way management.

We believe Alternative D to be unduly restrictive. We believe that the amount and scope of the restrictions is very detrimental the future of gas development in the area.

There are producing gas fields on both sides of the river at the present time and a lot of the management area is rated high, with very good prospects for finding more natural gas. The proposed plan (Alternative D) will surely stifle future gas development, this in an economic ally depressed area with a shrinking tax base. If these restrictions were necessary to preserve the Beauty of the Area, which we all love, then perhaps we could support them. They are not! The oil and gas people have demonstrated over the years that they can keep disruption to a bare minimum and very successfully rehabilitate disturbed areas.

Our organization participated heavily in the public input regarding the pipeline crossing below Stafford Ferry. There were many who said a crossing that magnitude was not possible without heavy environmental damage. The opposite has proven true, to a person floating the river the crossing is absolutely not noticeable and if you are on the banks only a small marker is visible. The heavy scarring that was supposed to occur is not present to any degree at all. In fact if you don't know where the line is you would not notice it at all, this is less than four years, at the end of 10 years all of the right-of-way will blend with its surroundings, a very small environmental price to pay for economic activity so vital to this area.

Existing management between the BLM or the gas industry is working well, it should not be made heavily restrictive as it is in alternative D.

Our organization supports the Right-of-Way management in Alternative B.

To sum up our position, we support Alternative D, but with changes we have outlined.

Public Meeting Lewistown, Montana July 20, 1987

170 1) What is the management plan the draft West HiLine RMP proposed for the trail up Cow Creek with respect to riparian habitat? Does the draft propose fencing about 100 acres in the Cow Creek area?

171 2) What problems are people (recreational users) causing on the UMNWSR? How does the draft propose to solve those problems?

172 3) Is the no wake speed provision enforced on the UMNWSR during hunting season?

173 4) Does the draft propose a carry in - carry out type of litter management program or any other type of regulations regarding garbage? If you have a law enforcement person on the river would then enforce all the regulations?

174 5) How was Alternative D selected as the preferred alternative? Was it a staff decision? Can public input change portions of the proposed alternative in the draft?

175 6) How does the draft propose managing the mineral resources, especially hard rock minerals?

No. 170

An activity plan will be prepared for the Cow Creek area which will be managed with a strong emphasis on riparian management. The activity plan may identify riparian pasture or exclosure needs but no specific acreage has been identified. The primary emphasis will be on grazing management practices to improve riparian community conditions.

For additional information please refer to the Cow Creek Implementation section of the Alternative D description in Chapter 2 of this document.

No. 171

The problems identified include trespass on private land, indiscriminate off-road vehicle use, sanitation problems and soil compaction at campsite locations. Trespass on private land is most prevalent on the stretch from Fort Benton to Coal Banks. Each alternative provides for acquisition of recreational land, whether it be through exchange or purchase. Indiscriminate off-road vehicle use is conflicting with the floater use along the corridor. The limited off-road vehicle designation which specifies that off-road vehicles must use only designated roads and trails should minimize this conflict. Sanitation is a problem around the more popular campsites. The proposed alternative states that sites be upgraded if sanitation becomes a health problem. Soil compaction, or bare ground, occurs at the more heavily used campsites and management would keep the character and rate of change due to human factors within acceptable levels.

No. 172

The no-wake speed is in effect during the primary recreation use season on the scenic and wild segments of the Upper Missouri National Wild and Scenic River, currently Memorial Day through the week after Labor Day. The no-wake speed provision is not applicable after Labor Day.

No. 173

A pack in/pack out policy would be implemented. BLM law enforcement personnel would enforce only BLM regulations. A cooperative agreement could be signed with another agency which would expand this authority.

No. 174

Please refer to response No. 140.

No. 175

Hardrock minerals will be managed under the 43 CFR 3809 regulations which are applicable where BLM is the surface managing agency. For additional information and text revisions please refer to the Mineral Resource Management section of the Management Common to All Alternatives description in Chapter 2.

176 7) What is the legal definition of the UMNWSR corridor boundaries?

177 8) Does the draft address trapping or hunting (throughout the study area or in Cow Creek)? How will the proposed ORV management affect trapping?

178 9) How do you currently access the Cow Creek area? Does the draft propose a change in that access?

179 10) How does BLM define a road and a trail for access purposes?

180 11) What has been learned from BLM riparian studies (on the north side of the UMNWSR)? Does the draft propose fencing the cottonwood stands in riparian areas?

No. 176

The Upper Missouri National Wild and Scenic River, as identified in this RMP, includes the legally defined corridor and adjacent public lands necessary to manage recreation use within the corridor. The Upper Missouri National Wild and Scenic River is legally defined as the area within the rims of the Missouri River, from Coal Banks Landing to five miles above the Kipp bridge; and the river and its bed between Fort Benton and Coal Banks Landing, and the lower portion within the Charles M. Russell National Wildlife Refuge.

No. 177

The draft RMP provides for recreational opportunities such as hunting and trapping in generic terms. For additional information please refer to the Recreation Management section of the Management Common to All Alternatives description in Chapter 2.

Off-road vehicle use would be restricted to existing roads and trails and seasonal limitations in the Cow Creek area. Specific details will be addressed in an off-road vehicle implementation plan.

No. 178

Current access to the Cow Creek area is by way of the old Cow Island Trail to the James Kipp homestead; the Cow Island Road to Spencer Ridge and the Harry Liddle property, floating the Missouri River to the James Kipp homestead, and by way of numerous, unmarked, foot trails.

The draft does not propose any change in the current access.

No. 179

A BLM road would fit one of the following criteria:

1. A two-track established solely from passage of vehicles over a period of time;

2. A vehicle route which has been improved and maintained by mechanical means to ensure relatively regular and continuous use.

3. A route maintained periodically for access by four-wheeled vehicles larger than 40″ width.

A trail is a route that accommodates one or two wheeled motorized or mechanical vehicles.

No. 180

Three years ago, a 60 acre riparian exclosure was constructed on the north side of the Missouri River. There was to be 30 acres with no grazing and 30 acres grazed in late fall. The area was enclosed with an electric fence, but because of difficulty in maintenance, there has been some livestock use within the exclosure each year. Despite this, willow and cottonwood reproduction is evident within the exclosure. These riparian studies have shown that proper livestock grazing, other than continuous grazing during the hot summer season, is not harmful to riparian reproduction and establishment.

181 12) Does the Nez Perce trail go up the bottom of Cow Creek? Does the draft propose acquiring all the deeded ground in the bottom of Cow Creek? Can the BLM force someone to trade that kind of ground for an isolated parcel?

No. 180 cont.

The Upper Missouri National Wild and Scenic River Coordinated Activity Plan will list management techniques in more detail. Fencing may be used as a grazing management tool, but it is doubtful if individual cottonwood groves would be fenced separately, except for smaller areas used by recreationists for camping or other uses.

No. 181

A 16-mile segment of the Nez Perce National Historic Trail is located in the Cow Creek drainage. The proposed RMP provides the guidelines to acquire private land either through easement or fee title processes for recreational opportunities. The amount of acquisition would depend on several factors including opportunities and funding.

The USFS is currently writing a management plan for the entire Nez Perce Trail which is slated for completion by October, 1989. This activity plan, which will be available for public review, will provide specific guidelines for management of the Nez Perce National Historic Trail.

Public Meeting Fort Benton, Montana July 21, 1987

Formal Statement

My name is Ernest K. Lehmann. I live in Minneapolis, Minnesota. I am President of Ernest K. Lehmann and Associates of Montana, Inc. and I am testifying on behalf of the company. Ernest K. Lehmann Associates of Montana is part of a group of companies who offer consulting geological services for the mineral industry and engage in exploration in their own right. I am a professional geologist and past president of the American Institute of Professional Geologists. I am a registered geologist in several states, including California and Alaska.

I am going to confine my remarks to the Sweet Grass Hills and to the aspects of the proposed management plan that relate to mineral exploration and possible mineral development. I guess my comments are particularly important that we get the oral testimony since we haven't found my written testimony.

We are a major holder of claims, mining claims and mineral leases in the Sweet Grass Hills area. And we also hold state and private leases, surface and mineral leases.

182 To summarize what I'm going to say, is that we believe that in the Sweet Grass Hills the only viable alternative presented in the management plan is Alternative A, which is the no action alternative. And this is because really for three major reasons, we think that the planning process has been flawed. We think the plan is based on inadequate data as to the Sweet Grass Hills only, we make no comment as to the rest. And we do not believe that the data presented substantiate the preferred alternative.

As I say we are a major claim owner, we have 25 mining claims on East Butte of which are in the proposed emphasis area, we have 28 claims at Middle Butte which are just to the north, and we have 30 claims at West Butte which are just to the west of the proposed areas which are at least where BLM has surface. These are areas, some of these claims are areas where BLM has the minerals and private persons have the surface. We are also the record lessee of extensive privately and state owned lands in all three areas.

183 I want to note for the record that we have never received an official notice of the proposed plan. We heard about the plan only indirectly even though the BLM has a record of our mining claims and we then had to initiate our own efforts to obtain a copy of the draft proposal.

We don't think that the draft is adequate and based on adequate information.
184 The areas in which I proposed to comment are the lack of discussion of recent mineral exploration activities in the area, the potential of the area for hosting economic mineral deposits, and the economic benefits and impacts of mineral development if it should occur in the area, and in fact the basic geologic information that's presented in the draft plan is incomplete and partially is actually incorrect.

No. 182

BLM's responses to your specific comments are given in the later portions of your statement.

No. 183

Please refer to response No. 13.

No. 184

Please refer to response No. 15.

I'm not going to comment here on the details of the geology that would consume the time that is best spent in other ways,but in my written presentation we do give you a thumb nail sketch of the geology.

I do want to talk about the mineral potential because I think the other people who are here from the public deserve that background. The historic mineral exploration in the Sweet Grass Hills has been going on since the turn of the century and is focused primarily on fluorite deposits on East Butte and some copper deposits on East Butte, placer gold in Middle Butte and a small lip silver occurrence which dates back to the early part of the century which is on West Butte and was mined in the early part of the century. Neither the placer gold nor the lead-silver occurrences are discussed in the draft plan even though active mining is going on at Middle Butte at the present time.

There is right now active mineral exploration at East, Middle and West Butte and as well at Grassy Butte which is not in the plan but is significant to note that that exploration is going on. Grassy Butte is just southeast of Middle Butte. And the reason for this exploration is that the Sweet Grass Hills has strong geologic similarities to very important gold producing and prospective gold producing areas. The closest analogy in terms of geology is with the Little Rocky Mountains where what is now the fourth largest gold producer in the U.S. is operating. That operation started in the early 80's, it's a very significant operation.

The other of these outlying hills that occur in north central Montana are also prospective. We are active in the Bear Paw Mountains, there are others who are exploring in the Judith's and the Moccasin's and of course, as I mentioned, the Little Rocky's. These areas have some geologic similarity to the famous district of Crippled Creek in Colorado which everybody has at least heard of, which was a very large gold producing area. They also have similarities geologically to some new discoveries being made in the south pacific and they have significant potential not only for medium to large scale open pit operations but also for higher grade underground deposits.

There is gold, there are gold occurrences in the Sweet Grass Hills. The placer at Middle Butte is of course the most obvious, but we are aware of the fact that a major company has drilled a number of holes at Grassy Butte and has encountered more grade mineralization. They have not yet determined the extent of that.

Our work to date also indicates significant, though not yet commercial, occurrences of gold and related metals and elements in rocks and soils at all three areas of East, West and Middle Buttes. The data presented by the BLM plan makes no presentation of the amount of exploration that has been done in the Sweet Grass Hills in recent years or does it discuss the direct and indirect present and future economic benefits to the area from hard mineral exploration and development.

We would estimate that since we began our exploration in the area in 1983 somewhere in excess of half a million dollars is already been spent by us and

others on that exploration. This has included geologic mapping, geochemical mapping, sampling, geophysical work, topographic surveys and related work. It's going to take a lot of drilling to delineate any targets or test any targets in the area. So there will be a large additional expenditure. A lot of that money that's spent remains in the area, it does not disappear mysteriously to somewhere else. There are rentals paid to landowners, royalties, advance royalties paid, we purchase goods and services such as meals and lodging, road building services, and so on.

You can reasonably expect that any, before any discovery is delineated to the point where a development decision could be made that it would cost from a million to five million dollars per target, and there may be a number of potential targets in the area. These expenditures alone have a significant impact on the communities in the area of Chester and Shelby. And none of that is covered in the report. A small or modest size I would say, mining operation, open pit mining operation, if one were discovered and developed, might employ 35 to 50 people for periods of 5, 10 or 20 years. And these would be people who are heavy equipment operators, technicians, administrative staff, and who are relatively well paid. So that you could look at a payroll from a single discovery of at least $800,000.00 to a million and a half. Larger operations would have comparably large affect and employ people.

It's kind of a rule of thumb by planners and social scientists that in the mineral industry one direct job produces three or four indirect jobs in the area in terms of services of various kinds, ranging from garages and machine shops to school teachers and so on. So that any mineral development in that area would have a significant and marked impact on the economy of the Sweet Grass Hills, none of this is cited in the plan.

172

We believe that the data presented in the plan in large measure does not substantiate the choice of Alternative D. We feel that decisions made with respect to mineral projects are really too fold. The exploration itself has very little affect on the environment. It's a temporary affect, we are required by the State of Montana, whether it's on Federal or private surface, to file with them reclamation plans and reclaim the land to their satisfaction. We are bonded in relation to that, in fact I met with the state people on another project this morning.

185 If mineral development occurs it's impossible to pre-judge what the affect would be. We do not now know whether it's a large deposit or a small deposit that what we might find, or if it's going to be mined underground or open pit, and until we have gone thru the exploration stage, we cannot make the kinds of judgments that are required nor can the BLM or the state. Therefore we think that environmental impacts must be judged on a project by project and a site by site basis. We feel that the current regulatory process in Montana is adequate. We deal with it, we dealt with it for a number of years in the exploratory stage, we are prepared to deal with it on the operational stage, in fact I've started some discussions with the state on that.

No. 185

Please refer to response No. 19.

Issues of air and water quality are dealt with by the state process in what we feel is in a reasonable manner and also the state process as the BLM is well aware deals with cultural and other resources. It does that on a site specific and project specific basis.

186 We're particularly concerned about the effect of some of the things like the raptor guidelines and feel that the imposition of the raptor guidelines to the Sweet Grass Hills is not warranted for a number of reasons. One is, there are no known nesting areas in the area at the present time as the plan states, and secondly we don't think that for example a three mile buffer is required around possible peregrine falcon's nests when I have some two blocks from my office on top of a skyscraper in downtown Minneapolis. So that we don't think the raptor guidelines should be imposed, if they do have to be imposed at some time it should be in relation to a specific project.

187 We don't see anywhere in the plan that there are any threatened or endangered species and the plan can't be, the Alternative D, can't be justified on that basis.

188 Our investigations of the areas, and we are not archaeologists and we are not out there looking for cultural sites but in three years of mapping we have not identified or noted any archaeological or cultural sites and the plan does not identify any.

189 We think that the exploration process has essentially zero effect on hunting as far as the elk or deer population goes and we think again that you cannot judge what the affect of a mining operation is going to be until the mining operation occurs, and again the state rules provide for taking that into consideration.

190 The same can be said of the affect on visual resources, which again are zero in the exploration stage, and again are dependant on the specific mine plans in the event something is developed.

191 Lastly we don't feel that the proposed Alternative D will do anything to mitigate the current conflict between Native Americans and Santa Fe Mining who is operating with us on East Butte and can't see that imposition of new restrictions and reduction of the five acre rule will do anything to resolve that conflict. That conflict as I understand it will probably be resolved in the courts.

From all of these factors therefore we conclude that the only alternative that should be considered in so far as the Sweet Grass Hills are concerned is Alternative A which is the no change alternative. Thank you.

No. 186

Please refer to response No. 20.

No. 187

Please refer to response No. 23.

No. 188

Please refer to response No. 24.

No. 189

Please refer to response No. 25.

No. 190

Please refer to response No. 26.

No. 191

Please refer to response No. 27.

Public Meeting Fort Benton, Montana July 21, 1987

192 1) Can you adopt part of one alternative and part of another for the final RMP? If you adopt Alternative D for the Missouri River, do you have to adopt Alternative D for the Sweet Grass Hills?

193 2) What is the schedule for modifying and adopting the plan? What form does a protest have to take?

194 3) Does the BLM have any plan for treating the noxious weeds in the river areas?

195 4) What is Alternative B?

196 5) Would the second choice for BLM be Alternative C?

No. 192

We can adopt any part of any alternative which has been analyzed in the document. Our proposed alternative reflects modifications based on the public opinion we have received.

No. 193

This final RMP/EIS is the modification of the draft. If BLM does not receive a protest within 30 days of issuing this final, we can issue a decision on what constitutes the RMP. If we receive a protest, a decision on that portion under protest will not be issued until the protest is resolved. The protest procedures can be found in the Dear Reader letter.

No. 194

The BLM has plans to treat the noxious plants in the river areas. The management guidelines are discussed briefly under "Grazing Management Implementation (Vegetation Related)" in Chapter 2.

The programmatic environmental assessment on Containment/Eradication of Selected Noxious Plants, referenced in the draft document, is available for review in the Lewistown District Office and in the Great Falls and Havre Resource Area Offices. BLM will emphasize biological control methods on large infestations in riparian zones and in floodplains along rivers and streams. Chemical control methods may be used along roads, trails, railroads, and on small upland infestations to eradicate or contain selected noxious plants as funding, personnel, and local coordination permits.

No. 195

Alternative B is the maximizing production alternative in which only those stipulations required by law (i.e., threatened and endangered species) would be applied to development on the public lands.

No. 196

BLM's proposed alternative is Alternative D; a blend of the three other alternatives. A second choice alternative has not been identified.

ERRATA

This section contains the changes and additions made to Chapters 3 and 4 of the draft RMP/EIS.

Many of the revisions required changing only a word or figure within a sentence, however, the entire sentence has been reprinted for the reader's convenience.

The revisions are given in the order of their appearance in the draft RMP/EIS. The left hand column of the following section shows the location (by page, column, paragraph and if necessary, the sentence) of the change made to the draft RMP. The indented text then contains the changes or additions made in that location. It would be to the reader's convenience to read this section in conjunction with the draft document.

LOCATION OF CHANGE

SHOULD READ

Chapter III—Affected Environment

Page 43, Column 1, Paragraph 6

Groundwater of better quality and quantity is available from deeper aquifers such as those contained in the Madison Group of formations, but the costs associated with development make it prohibitive for use except for large commercial interests or municipalities.

Page 43, Column 2, Paragraphs 2 and 3

The planning area is underlain by sedimentary deposits which include sandstones, shales, limestones and dolomites. In places these rocks have been folded, faulted and intruded by igneous bodies. Several episodes of glaciation occurred across the region. The resulting geologic settings include glaciated flat-lying sediments in northcentral Montana, large scale overthrust faults along the Rocky Mountains, and isolated outcrops of igneous rock in the Sweet Grass Hills and Bear's Paw Mountains.

Three uplifts (the Sweet Grass Arch, the Bear's Paw Mountain Arch and the Sweet Grass Hills) are the prominent structural features. Portions of the Montana disturbed belt and the Rocky Mountain overthrust belt cross the western edge of the planning area (Ross, Andrews and Witkind, 1958). Large amounts of glacial till and outwash were deposited in the regions by the Illinoian and Wisconsin stages of glaciation (Perry, 1962).

Page 43, Column 2, Paragraph 6, Additional Sentence

Appendix 1.3 contains more detailed information on oil and gas history and the program's current and reasonably foreseeable direction.

Page 45, Column 1, Paragraph 2, Sentence 1

Oil and gas production figures are provided in the Social and Economic Conditions section (page 75, Table 3.20) of the draft document.

Page 45, Column 1, Paragraph 4

An estimated 850,000 tons of coal was mined from the Big Sandy and Milk River Coal Fields in Blaine County (Hubbard, Koch, and Biggs, 1966) between 1890 and 1960 for local use. No coal production is occurring at this time.

Page 45, Column 1, Paragraph 6

Overall, the coal in the planning area is similar in grade and British Thermal Unit content to the coal mined from the Powder River Basin in southeastern Montana and northeastern Wyoming. The exception is that the coal beds in the planning area are thinner and less continuous in lateral extent. Currently, these localized deposits are passed over in favor of the more strippable coal deposits in the Powder River Basin. Estimated coal resources, by county, are identified in Table 3.2.

Page 45, Column 2, Paragraphs 1, 2, 3, and 4

Locatables

Deposits of gold, silver, copper, lead, zinc and bentonite occur in the planning area. Metallic deposits are associated with the igneous intrusions which uplifted the Bear's Paw Mountains and the Sweet Grass Hills. Locatable bentonite deposits are associated with the thick Cretaceous shales in the planning area. Figure 3.10 (a new figure in this Errata section) is a regional map showing the number of unpatented mining claims per township.

The occurrences of locatable minerals in the Sweet Grass Hills and their development potential are discussed in the Emphasis Area section of this chapter.

There are 35 unpatented mining claims in Blaine County, north of the Fort Belknap Indian Reservation, believed to be located for the purpose of developing the bentonite resources in the Cretaceous Bearpaw Formation (see Figure 3.10 of this Errata section). Commercial bentonite has been produced from the Bearpaw shale in both Phillips and Valley Counties. However, both of these mines, and their associated processing plants, were closed down several years ago due to the downturn in the petroleum industry; a major bentonite user. While there is a high occurrence potential for bentonite on those claims underlain by the Bearpaw Formation, the development potential would have to be rated as low at this time.

There is a group of unpatented mining claims in the Bear's Paw Mountains of Blaine County, east of the Rocky Boy Indian Reservation (see Figure 3.10 of this Errata section). There is no BLM administered surface associated with these claims. Gold is probably the primary mineral of interest. An exploration program was conducted in 1986, and unconfirmed reports indicate that an ore deposit of unknown size and grade has been identified.

There are 32 unpatented mining claims in the Breaks region of Blaine County just north of the Missouri River. Some of the claims lie inside the management boundaries of the Upper Missouri National Wild and Scenic River Corridor and the Cow Creek Wilderness Study Area. These claims are located on, and around several small igneous intrusions called diatremes. The composition of these diatremes is similar to kimberlite, which hosts diamonds in South Africa and other diamond producing areas. Geologic conditions suggest that diamonds could possibly be present in these diatremes (Hearn, 1979), but to date there have been no reports of any diamond occurrence.

Salables

Most of the planning area was glaciated during the Pleistocene epoch. Continental glacial ice extended south to approximately the Missouri River. The Sweet Grass Hills; Bear's Paw Mountains and the Little Rocky Mountains remained unglaciated, rising above the surrounding ice sheet (Colton, Lemke and Lindvall, 1961). Extensive material deposits resulted from the glacial activity, and the more recent stream activity.

These deposits are sources of sand, gravel and fill material. The commercially developed sources are privately owned. The primary users of federally owned mineral material deposits are the Bureau of Reclamation, the State of Montana and area county governments.

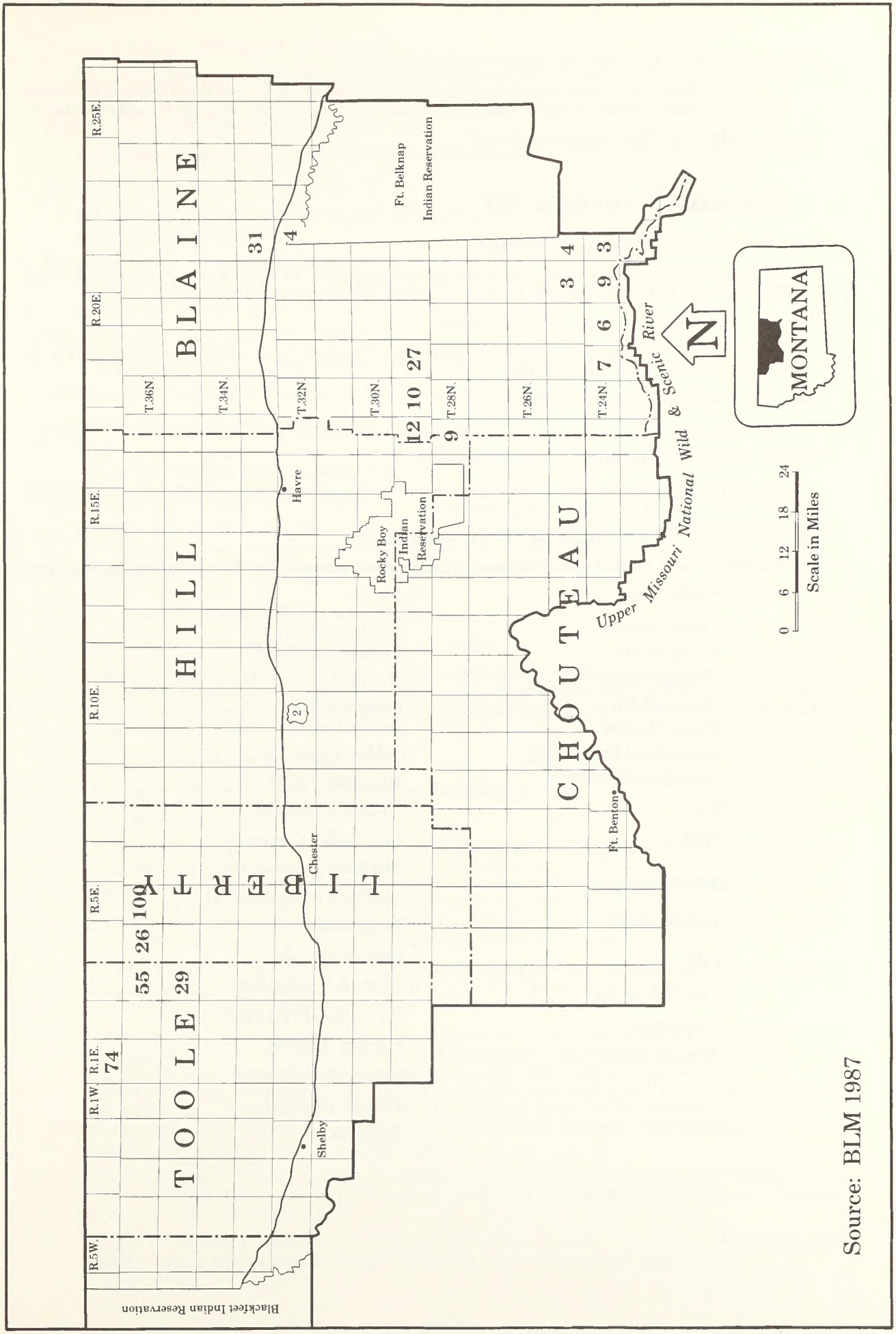
Page 46, Column 2, Paragraph 10

Riparian areas are those areas within wetlands; geographically delineated by distinctive resource values and characteristics. These values and characteristics result from the influence by permanent water. Availability of permanent water allows a greater diversity of plant, fish and wildlife species than surrounding ecosystems. Riparian zones vary in size and vegetative complexity because of the many combinations created between water resources and physical site characteristics (Hanson 1980). Site characteristics include topography, aspect, gradient, elevations, soil type; influenced by permanent water and water quality, and plant community. Riparian areas may be associated with lakes, reservoirs, estuaries, potholes, springs, bogs, wet meadows, and ephemeral, intermittent, or perennial streams.

Riparian areas are unique and among the more productive and important ecosystems. Healthy riparian systems filter and purify water as it moves through the riparian zone, reduce sediment loads, enhance soil stability, provide micro-climate moderation when contrasted to extremes in adjacent areas, and contribute to groundwater recharge and base flow (BLM Riparian Area Management Policy, 1987).

Appendix 2.4 lists the major riparian areas along the UMNWSR. The primary sources of surface water in the entire planning area are listed on page 43 of the draft.

Figure 3.10 Numbers of Unpatented Mining Claims per Township in the West HiLine RMP Area.



Page 50, Column 1, Paragraph 3, Include As Last Sentence

For more information on candidate species management, please refer to the Wildlife & Fisheries Implementation portion of the Management Common to All Alternatives section of Chapter 2.

Page 50, Column 2, The Subheading Range

Grazing Management

Page 50, Column 2, Paragraph 6, Sentence 1

There are 397 grazing allotments in the planning area, of which 216 are administered under Section 3 of the Taylor Grazing Act and 181 under Section 15 of the Act.

Page 50, Column 2, Paragraph 6, Last Sentence

The Great Falls Resource Area directly administers 67 Section 15 allotments, while the Havre Resource Area administers the rest.

Page 50, Column 2, Paragraph 8, Sentence 1

Management categories have been assigned to each of the 397 grazing allotments.

Page 51, Column 1, Paragraph 1, Last Sentence

Objectives are prepared and a grazing system is developed to consider all resource needs within the allotment and on surrounding allotments.

Page 54, Column 2, Paragraph 3, Additional Information

The following is a list of species of special interest or concern in the West HiLine planning area.

MAMMALS

Dwarf Shrew
Preble Shrew
Merriam Shrew
Big-eared Bat
Hoary Marmot
Black-tailed Prairie Dog
Black-footed Ferret
Wolf
Lynx

AMPHIBIANS

Dakota Toad

FISH

Pallid Sturgeon
Paddlefish
Sicklefin Chub

BIRDS

Northern Goshawk
Ferruginous Hawk
Merlin
Peregrine Falcon
Prairie Falcon
Golden Eagle
Mountain Plover
Upland Sandpiper
Long-billed Curlew
Northern Pygmy Owl
Northern Saw-whet Owl
Long-eared Owl
Burrowing Owl
Pileated Woodpecker
Olive-sided Flycatcher
Western Bluebird
Clay-colored Sparrow
Brewer's Sparrow
Bobolink

Page 56, Column 1, Paragraph 5, Sentence 2

The entire 149 miles of the Upper Missouri National Wild & Scenic River flows through the planning area.

Page 56, Column 2, Paragraph 7, Last Sentence

Each of the BLM-administered wilderness study areas is described in detail in Appendix 2.8.

Page 58, Table 3.7, Right-of-Way Footnote

Rights-of-Way are issued for various utility and transportation purposes. Table 3.8 identifies rights-of-way by county.

Page 60, Column 1, Paragraph 3, Sentence 1

The Kevin Rim contains significant resources (exceptional raptor habitat and significant archaeological sites) which are unique to the planning area.

Page 60, Column 2, Paragraph 2, Sentence 3

Presently 54 wells have been drilled in the proposed emphasis area.

Page 61, Figure 3.5 Was Revised As Shown on the following page

Page 62, Column 1, Paragraph 2, Sentence 1

There are five rights-of-way within the Kevin Rim area (four roads, pipelines, etc. associated with oil-gas activity and one communication site).

Page 62, Column 1, Paragraph 10, Sentence 1

The Sweet Grass Hills emphasis area is unique because of its traditional religious importance to the Blackfeet, Chippewa-Cree, Gros Ventre, Blood and other Native American tribes; its habitat potential for reintroduction of the endangered peregrine falcon; and its important elk and deer habitat.

Page 62, Column 1, Paragraph 11, Delete Sentence 2

Page 62, Column 1, Paragraph 11, Sentences 4, 5, and 6

There are approximately 7,952 BLM-administered surface acres within the boundaries of these three Buttes (4,760 acres on East Butte, 600 acres on Middle Butte and 2,592 acres on West Butte). There are approximately 11,072 BLM-administered subsurface acres beneath the public surface on these three Buttes.

Page 62, Column 2, Delete Paragraph 4

Page 63, Figure 3.6 Was Revised As Shown on the following page

Page 64, Column 1, Paragraphs 1-8

The Sweet Grass Hills are composed of three separate areas known as East Butte, Middle (or Gold) Butte and West Butte. The Sweet Grass Hills were formed in Eocene time (Truscott, 1976), approximately 50 million years ago, by the intrusion of igneous material into the overlying sedimentary rock as plugs, laccoliths, dikes and sills. These sedimentary rocks were domed upward in the three separate areas that make up the Sweet Grass Hills and dissected by erosion into landforms resembling three distinct groups of hills rather than three individual buttes.

All three buttes have lately been the focus of hardrock exploration activity, primarily for precious metals. Very little published data is available on the Sweet Grass Hills and only recently has information become available concerning their mineral potential.

The current mineral ownership in the Sweet Grass Hills varies considerably. The following are examples of mineral ownership patterns: federal surface/federal minerals, private surface/federal minerals, private surface/private minerals, and state surface/state minerals. All of the federally owned minerals are currently open to location and entry under the mining law, with the exception of those portions of T. 36 N., R. 5 E., Sections 29 and 30 (withdrawn by the Bureau of Reclamation.) This withdrawn area presently consists of 569.67 acres. Detailed maps and plats of the area are available from local BLM offices.

East Butte is the largest of the three buttes and is composed of large masses of syenite porphry in contact with the limestones of the Madison Group. It also has the longest history of mineral exploration and production.

During World War II, East Butte was investigated as a possible fluorspar (CaF_2) source. The report concluded that better deposits existed that were not as remote (Ross, 1950).

Figure 3.5 Kevin Rim Emphasis Area

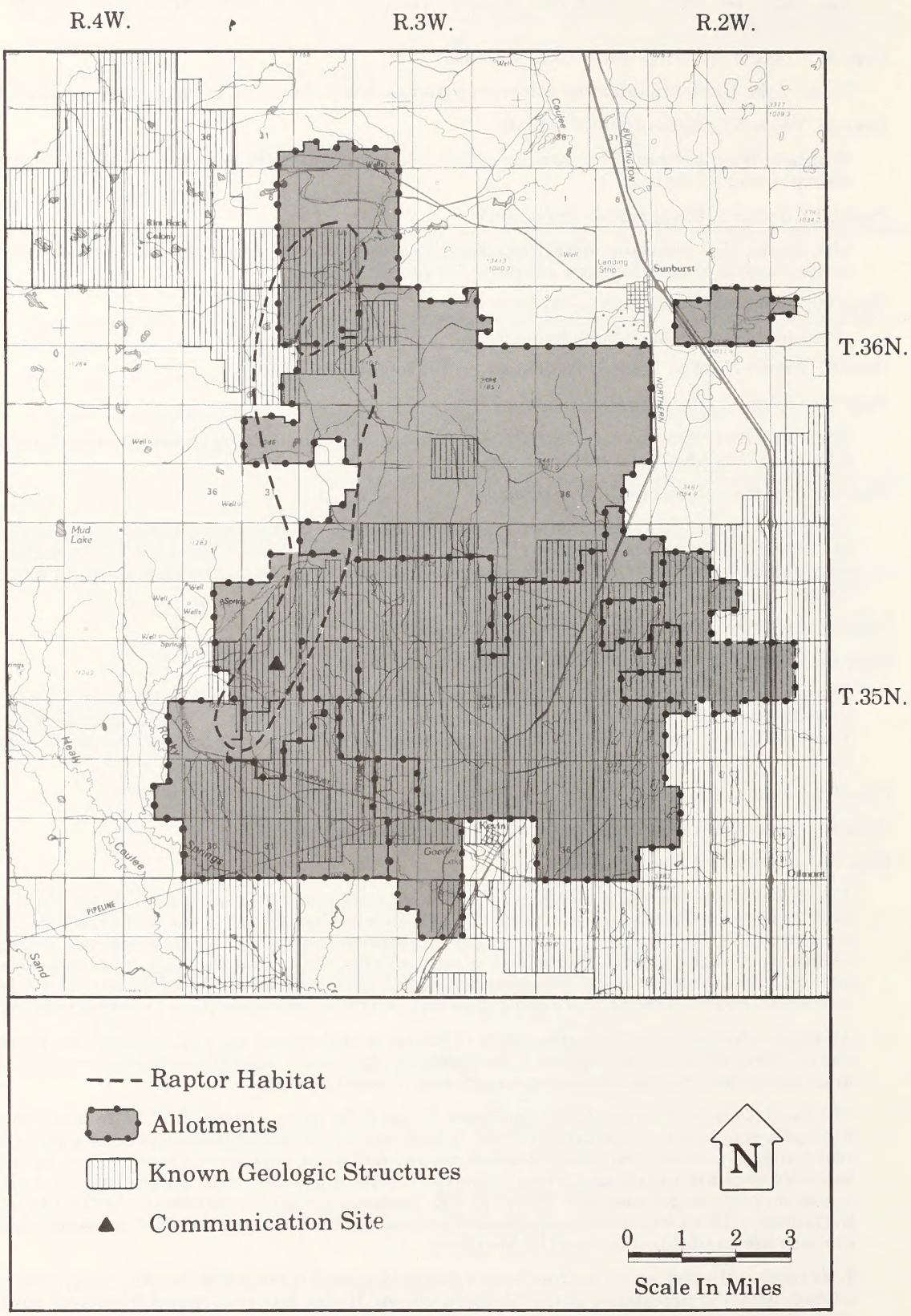
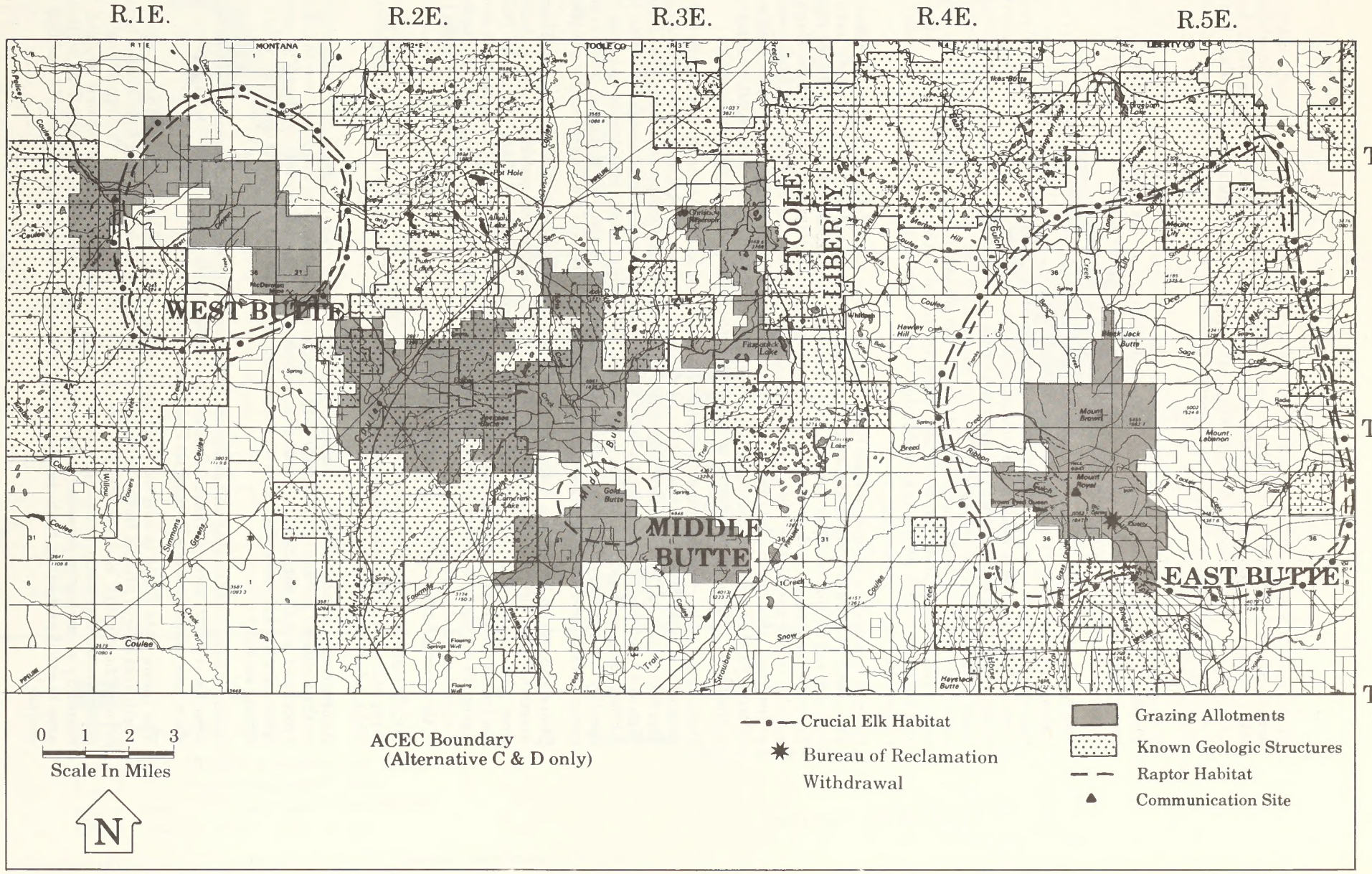


Figure 3.6 Sweet Grass Hills Emphasis Area



Placer gold prospecting was widespread on East Butte near the turn of the century. The principal areas of placer mining were on Tootsie Creek, with some work being done on Halfbreed, Sage and other creeks on the southern slopes of East Butte. The total production was estimated at less than 2,000 ounces. The distribution of the workings suggest that the placer gold of East Butte may have been derived in part from the fluorspar lodes occurring at the syenite-limestone contacts (Ross, 1950).

Iron deposits were located on several claims east of Mount Royal in Section 32, T. 36 N., R. 5 E. These claims were patented in 1896. Most of the iron occurs in or near blocks of Madison limestone contained within the syenite. Samples reportedly assayed at 60% iron, but no ore is believed to have been shipped (Ross, 1950).

The Brown Eyed Queen Mine, located a mile southwest of Mount Royal, produced several small amounts of rich copper ore at the turn of the century (Ross, 1950). Records show production from lode deposits at the Sweet Grass Mine, near the head of Ribbon Gulch, of about 8,700 pounds of copper, 8,400 pounds of lead, 1,100 pounds of zinc, and 651 ounces of silver. Development at the Sweet Grass Mine was in progress in the mid 1960s. A mineralized fracture zone about 4-feet wide was being worked. Grab samples of the ore assayed 4 to 8% copper, 25 to 50% lead, and 12 to 25 ounces per ton silver with a trace of gold. Two 50-ton shipments of high silica ore were made to the Anaconda Smelter (Hubbard, Koch and Biggs, 1966). It is not known for certain why this prospect was abandoned, though it was probably due to its remote locale, small size and a downturn in the copper market.

Current exploration efforts on East Butte are focused on identifying gold/silver mineralization. The area has been largely unexplored in modern time. Soil and rock chip sampling have identified areas of anamalous gold concentrations on East Butte; particularly in the Breed Creek and Tootsie Creek areas, and up the South Fork of Tootsie Creek toward Mount Royal. Exploration activity in the summer of 1987, revealed gold mineralization of two general types. Low grade, widespread gold mineralization occurring at shallow depths within the syenite; and areas of relatively richer grade, yet particularly erratic, gold mineralization within solution breccia zones of the Mission Canyon limestone, which developed at the syenite-limestone contact.

Data supplied by various mineral companies was used to assess the gold/silver development potential of East Butte with the criteria in Appendix 3.4 (a new Appendix shown in the back of this document). Large portions of East Butte have moderate development potential as depicted in Figure 3.11 of this Errata section. No high development potential areas were identified because while widespread gold anomalies were found, not enough exploration work has been done to identify an ore body. This may change as more work is done in the area. Several mineral companies believe there is an extremely favorable likelihood of finding mineable gold deposits.

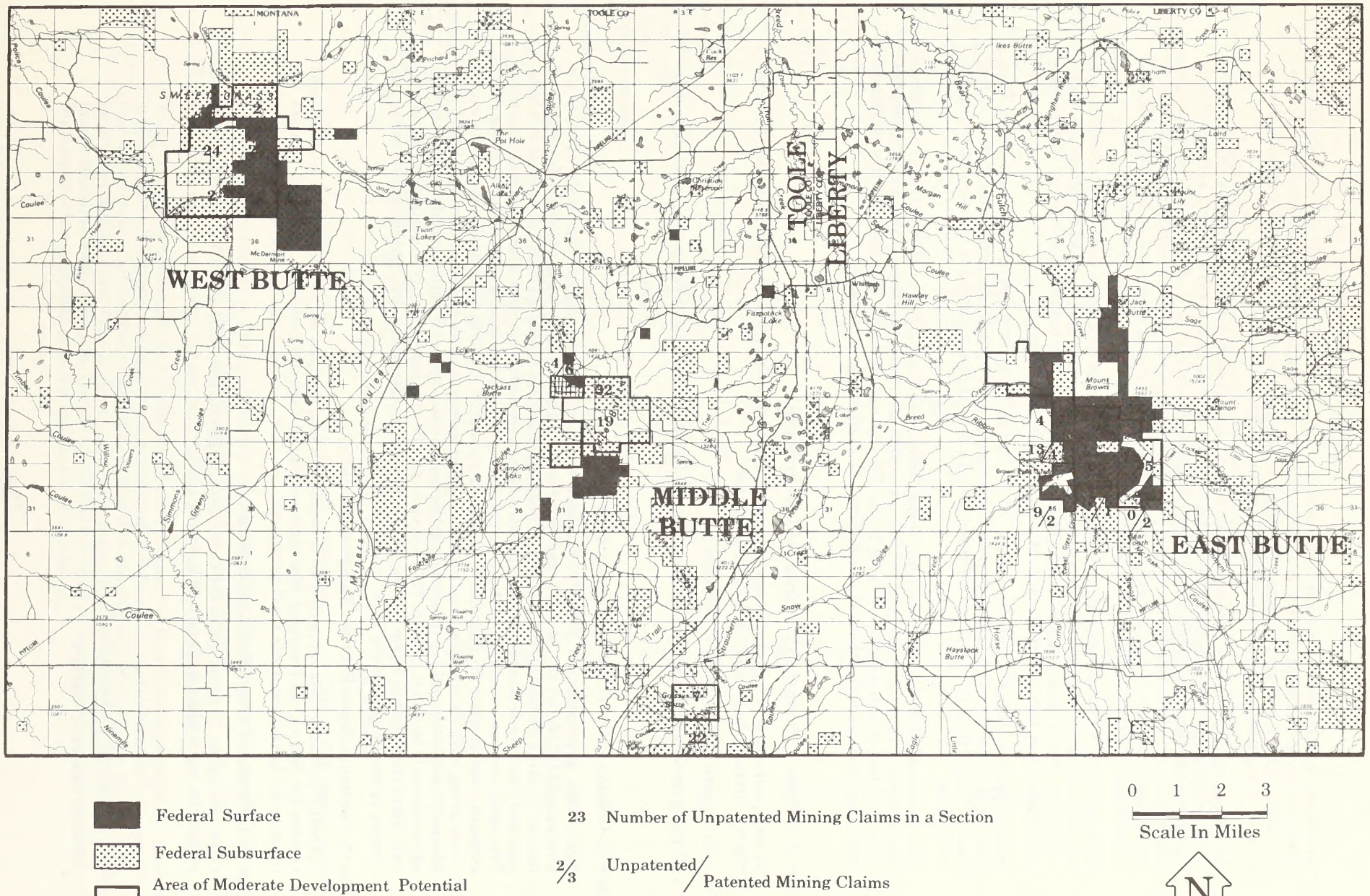
Stone and riprap have been extracted from quarries in the East Butte intrusives. There is an inactive riprap quarry in Section 32, T. 36 N., R. 5 E. located on a patented mining claim. Rock from this quarry was used as riprap during the construction of Tiber Dam. The Bureau of Reclamation has placed a withdrawal on lands adjacent to this quarry to secure future sources of riprap, though it is doubtful that but a small fraction of this material is needed. The lands under this withdrawal have been nominated by industry as an area of critical mineral potential because of the strong likelihood for the occurrence of precious metal deposits.

Middle Butte, also known as Gold Butte, consists of several igneous masses, and many associated dikes and sills, that have been intruded into shales of the Cretaceous Colorado Group (Kemp and Billingsley, 1921).

Anamalous gold and silver concentrations occur in soil, stream sediment and rock-chip samples on the northern portion of the Middle Butte complex. These mineral deposits occur in faulted and brecciated zones within the igneous intrusives and altered Colorado shales. The criteria in Appendix 3.4 indicates this area has moderate development potential (see Figure 3.11 of this Errata section).

Stream sediment sampling and exploration work on the most prominent peak of the Middle Butte area, Gold Butte, does not indicate occurrences of locatable mineral deposits. BLM records do not show any mining claims located on Gold Butte itself.

The name Gold Butte is derived from the historic placer gold mining that took place on the northwest side of Middle Butte, near the head of Eclipse Gulch. Mining first started here at the turn of the century, with several periods of revival since (Ross, 1950). The latest placer mining effort involves reworking the old placer tailings and mining some select new ground. This is currently occurring on patented claims in the southeast quarter of Section 18, T. 36 N., R. 3 E. The area is rated as having high development potential for placer gold (Figure 3.11 of this Errata section).


R.1E.
R.2E.
R.3E.
R.4E.
R.5E.
T.37N.
T.36N.
T.35N.
TOOLE CO
LIBERTY CO
TOOLE
LIBERTY
WEST BUTTE
MIDDLE BUTTE
EAST BUTTE
MONTANA
Ikes Butte
Jack Butte
Mount Brown
Mount Lamon
Hayhook Butte
Fitzpatrick Lake
Hawley Hill
Morgan Hill
Mount Lily
Jackass Butte
Twin Lakes
Big Lake
Alkali Lake
Christian Reservoir
Fred Spring
The Pot Hole
McDermott Mine
Crystal Lake
Snow
Strawberry
Sheep
Eagle
Coulee
Creek
Trail
Gulch
Ribbon
Breed
Morgan
Laird
Sage
Hay
Horse
Corral
Foothill
Flowing Well
Springs
Spring
Wells
Pipeline
Reservoir
Res
Butte
Hill
Lily
Lake
Mines
Gulch
Trail
Ridge
Canyon
Pass
Meadow
Meadows
Basin
Flat
Flats
Valley
Mountain
Mountains
Peak
Peaks
Summit
Divide
Ridge
Cliff
Cliffs
Rock
Rocks
Stone
Stones
Timber
Forest
Woods
Grass
Hay
Corral
Fence
Gate
Road
Trail
Bridge
Ford
Crossing
Ditch
Canal
Flume
Dam
Reservoir
Pond
Lake
Stream
River
Creek
Coulee
Gulch
Ravine
Canyon
Pass

West Butte is a large igneous mass with associated dikes and sills, intruded into Colorado shales. Small blocks of sedimentary rock from the underlying formations are contained with the intrusive body. There is a spectacular talus slope on the southeast corner that is probably due to erosion along a fault-line (Kemp and Billingsley, 1921).

Anamalous gold and silver concentrations occur in soil, stream sediment and rock-chip samples in an area generally northwest of West Butte peak. A little lead ore containing some gold and silver was produced in 1908, from patented claims in Section 14, T. 37 N., R. 1 E. These mineral deposits occur in brecciated zones within the intrusives and altered sedimentary formations and along fault contacts. Using the criteria in Appendix 3.4, this area is rated as having moderate development potential for gold and silver (see Figure 3.11 of this Errata section).

Just southeast of West Butte, on private land, a 2-foot thick coal seam in the Cretaceous Eagle formation has been altered by intrusives into what is locally described as a high grade semi-anthracite. This coal was occasionally mined for local use, probably as far back as 1890 (Kemp and Billingsley, 1921). There is currently no coal mining in the area.

Several miles south of Middle Butte, in T. 35 N., R. 3 E., Sections 22 and 27 is Grassy Butte. This feature is probably related to the same mechanisms that formed the three main buttes of the Sweet Grass Hills. It is a small volcanic breccia pipe that has intruded into the surrounding sediments.

There is no BLM managed surface on Grassy Butte, but there are 29 unpatented mining claims filed on federally owned minerals. In 1987, an exploration program for precious metals recovered over 3,000 feet of drill core from Grassy Butte. Though data is scarce, this area is believed to have moderate development potential (see Figure 3.11 of this Errata section).

Page 64, Column 1, Paragraph 9, Include As Last Sentence

To date, no intensive raptor surveys have been made in the Sweet Grass Hills. However, inventories are planned beginning in the spring of 1988.

Page 64, Column 2, Paragraph 1, Sentence 1

No peregrines are currently known to nest in the Sweet Grass Hills, but they do occur as migrants.

Page 65, Column 1, Insert Between Paragraphs 4 & 5

Since 1983, approximately $500,000 has been spent on mineral exploration in the area, or an average of $125,000 a year. Mining expenditures during exploration bring about employment and income in other sectors of the economy. These expenditures represent direct payments to wholesale and retail trade establishments, construction, transportation, and other services in the area. The local economy would benefit due to purchases made from businesses in the area. As these expenditures circulate through the local economy about $110,000 in other business activity would occur along with the full time equivalent of three to four jobs and annual earnings of $50,000. Most of this activity will occur for a short time period (two to three months) and the number of jobs affected would be about 12 to 16. This accounts for .4% of Liberty County's nonfarm employment and .5% of the nonfarm earnings. Mineral exploration offers some, but limited employment and income opportunities for the local economy.

Page 65, Column 1, Insert Between Paragraphs 7 & 8

Potential habitat exists for *Antennaris aromatica* and *Rorippa calycina*, candidate T&E plant species for listing, and several Montana species of "special concern." However, to date, no inventories have been made for these plants.

Page 65, Column 2, Paragraph 4, Last Sentence

Of the 464 miles, 16 miles are in the Cow Creek emphasis area; one of the few trail segments the public can enjoy almost exactly as it was in 1877.

Page 71, Table 3.14, Footnote No. 1

Actually Observed Visitors

Page 72, Table 3.15 Was Revised As Shown

TABLE 3.15
RECREATION FACILITIES

Facility Name	River Mile	Facilities Available	Public Land Access	Permission Required for Access Across Private Property	Ownership
Fort Benton Visitor Center	1 N	Information, Interpretive Display	Yes		BLM
Fort Benton Boat Launch	1 N	BL	Yes		City
Evans Bend	6.5 S	DC, PT	No		BLM
Rowe Island	13.0 N	DC	No		BLM
Senieurs Reach	16.35	DC	No		BLM
Black Bluff Rapids	19.3 N	DC	Yes	Yes	BLM
Loma Ferry	21	BL		Yes	S
Wood Bottom	21.2 N		Yes	Yes	
Marias Island	22.5 N		Yes	Yes	
Spanish Islands	27.2 S	DC	No		P
Virgelle Ferry	39	BL	Yes		S
Coal Banks Landing	41.5 N	C, BL, W, PT, RS	Yes		S
Little Sandy Creek	46.7 N	DC, PT	Yes	Yes	BLM
Little Sandy Creek	47.4 N		Yes		
Lanning Ranch	51 N	L	Yes		P
White Rocks	53.1 N		Yes	Yes	
Eagle Creek	55.7 N	DC, PT	Yes	Yes	P
Hole-In-The Wall	62.8 S	C, S, PT	Yes	Yes	S
Dark Butte	69 N	DC, PT	No		BLM
Pablo Bottom	72.8 N	DC, PT	No		BLM
Stoos Ranch	75.3 N	L	Yes		P
Slaughter River	76.5 N	C, S, PT	Yes		S
Arrow Creek	77 S		Yes	Yes	P
Judith Landing	88.5 N	C, BL, PT, W, RS	Yes		S
Stafford Ferry	101.8 S	CT, W, BL	Yes		S
Gist Ranch	122.6 N		Yes		BLM
Cow Island Landing	125.5 N	DC, PT			S
Bull Creek	127 N		Yes	Yes	P
Woodhawk Bottom	130.6 S	DC, PT	Yes		BLM
	131.0 S				
Power Plant Bottom	132.3 N	L	Yes	Yes	P
Heller Bottom	136 S		Yes	Yes	P
Kendall Bottom	144 N		Yes		CMR
Knox Bottom	145.3 S		Yes		CMR
Le Clair Bottom	148.1 N		Yes		CMR
James Kipp State Park	149 S	C, PT, W, BL	Yes		S

Legend

River Mile
- N — North
- S — South

Facilities
- BL — Boat Landing
- DC — Designated Campsite
- PT — Pit Toilet
- C — Campground
- W — Water
- RS — Ranger Station
- S — Adirondack Shelter
- L — Private Launch Site

Ownership
- BLM
- S — State
- P — Private
- CMR — C M Russell Wildlife Refuge

Page 75, Column 2, Paragraph 1, Sentence 1

Oil and gas production is another basic industry of the area, providing 770 jobs in the oil and gas sector and an estimated 2,400 jobs in other sectors of the economy.

Page 76, Column 1, Paragraph 2 Additional Information At End of Paragraph

These indicators are simply an inference and are not meant to be a direct measurement of social well-being or all encompassing. People experience well-being as individuals and groups, while this assessment is attempting to determine the well-being of the study area as a whole. It should be pointed out that even if particular statistics show poor social well-being, the residents may not perceive their situation as such. Location and lifestyle may be more important to local residents than some other economic or social indicators of well-being.

Page 77, Column 1, Paragraph 1, Additional Information At End Of Paragraph

A Biological Assessment was prepared to determine the possible impacts to threatened or endangered wildlife species from implementation of the proposed alternative. The assessment found implementing the proposed plan would have no impact on threatened or endangered wildlife species. The U.S. Fish and Wildlife Service, agreed with that conclusion (see Appendix 4.2).

Page 78, Column 2, After Paragraph 2, Change Heading

Impact to Soils and Water

Page 78, Column 2, Paragraph 5, Additional Information at End Of Paragraph

Mining and other surface disturbing activities generally impact water quality and quantity both on the surface and subsurface. The degree of the impact depends on several factors such as location, type, and extent of the disturbance and the stream or aquifer being disturbed.

Locally significant impacts to soils and watersheds could occur at various sites along existing roads and trails as vehicles maneuver around rutted areas and potholes; widening existing roads and exposing more soils to potential erosion.

Federal regulations have set limits above which degradation of water quality and quantity cannot occur. The regulations for the State of Montana are even more stringent, not allowing degradation of water quality or quantity off the disturbance or mine site.

Page 79, Column 1, Paragraph 2, Delete Last Two Sentences

Page 79, Column 2, Paragraph 1

The land tenure adjustment program would have no physical impact on deposits of mineral resources. However, due to changes in land and mineral ownership patterns that may result from land adjustment, impacts to the mineral industry would be possible. The nature of the impact would be highly variable because of several factors such as: the land adjustment acreage, the mineral potential of the lands, the type of mineral commodity present, the creation or elimination of split estate acreage, and the environmental sensitivity of the lands involved. The exact nature and magnitude of impacts to mineral resource development would also depend on the specific proposal.

For locatable minerals, land adjustments which consolidate surface and minerals ownership and create larger blocks of public land simplify the permitting process, but may impose constraints on the operator in the form of operating limitations and added reclamation requirements.

For oil and gas development, land adjustments which increase federal ownership would tend to increase the cost of development for the oil and gas industry. Generally, it is more expensive to operate on federal than on private surface, regardless of mineral ownership due to additional constraints in the form of operating limitations and added reclamation requirements.

Consolidation of surface and minerals ownership simplifies, but does not necessarily shorten, the BLM permitting process. It allows greater control over the surface aspects of lease operation and again involves fewer parties in the approval process. If the BLM acquires federal minerals in areas managed under more stringent surface constraints (such as in wilderness study areas) it would increase the difficulty of mineral development, a locally negative impact on the mineral industry.

Page 79, Column 2, Additional Information Between Paragraphs 4 and 5

Impacts to Social and Economic Conditions

Mineral exploration would offer some, but limited, employment and income opportunities for the local economy. If exploration leads to mineral development, the local economy would benefit from long-term employment and income opportunities. Hardrock mineral development would benefit local communities. There also would be a trade off for that economic gain in the form of lost resource values such as wildlife habitat and watershed. The extent and significance of these employment and income opportunities cannot be determined without a proposed mining operation (i.e., level of activity, mine life, etc.). These impacts would be analyzed during the environmental assessment for a mineral development proposal.

Page 80, Column 1, Paragraph 1,

A total of 44,143 acres of public land could be disposed of.*

*This Change also applies to the following locations:

Page 80, Column 2, Paragraph 5
Page 82, Column 1, Paragraph 1
Page 83, Column 1, Paragraph 6
Page 84, Column 1, Paragraph 9
Page 85, Column 1, Paragraph 1, Lines 1, 2 and 3
Page 86, Column 1, Paragraph 5
Page 87, Column 1, Paragraph 3

Page 80, Column 1, Paragragh 5,

This alternative limits vehicular use to existing roads and trails on 148,335 acres of sedimentary breaks soils with slopes greater than 30%. Limiting ORV use would reduce the disturbance on these fragile and highly erodible soils; a locally significant, but moderate overall positive impact.

Page 80, Column 1, Paragraph 6, Sentence 2

Locally significant negative impacts would occur in this area due to ORVs disturbing the soil and causing accelerated erosion and loss of productivity.

Page 80, Column 2, Delete Paragraph 3

Page 81, Column 1, Add To End of Paragraph 2

This could be a locally significant impact.

Page 81, Column 1, Paragraph 3

This alternative limits vehicular use to existing roads and trails on 148,335 acres. Locally significant, but moderate overall positive impacts would result from limiting ORV use because of reduced disturbance on fragile and highly erodible soils and reduction of accelerated erosion.

Page 81, Column 1, Paragraph 4, Sentence 2

Locally significant negative impacts would occur due to accelerated erosion.

Page 81, Column 1, Paragraph 4, Delete Sentences 3 and 4

Page 81, Column 1, Delete Paragraph 8

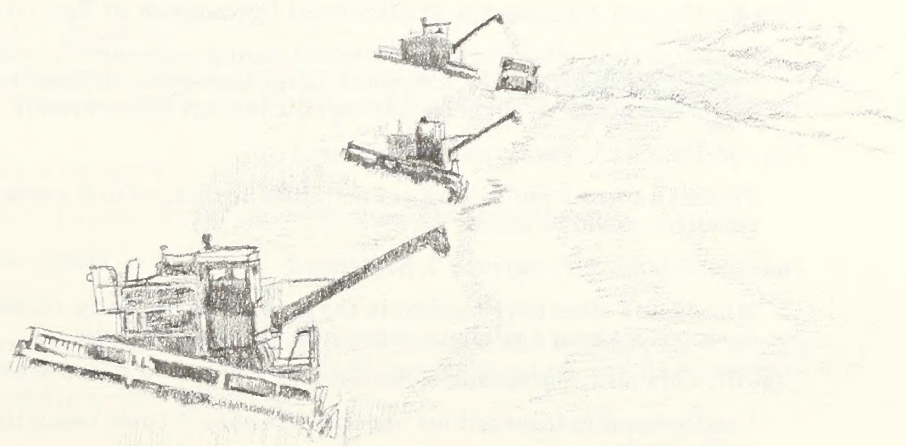
Page 81, Column 2, Paragraph 3

A total of 44,143 acres of public land could be disposed of. Impacts would be minor.

Page 81, Column 2, Delete Paragraphs 4 and 5

Page 81, Column 2, Paragraph 9

At present, denying disturbance activities within 1/4-mile of active raptor nesting sites causes minor impacts to oil/gas exploration and development by requiring work to be delayed or routed differently.



Page 82, Table 4.1 Was Revised As Shown.

TABLE 4.1
CONSTRAINTS ON OIL & GAS EXPLORATION & DEVELOPMENT (ALTERNATIVE A)[1]

Management Categories	High Development Potential	Acres	Moderate Development Potential	Acres
1. **Open Subject to Standard Terms and Conditions** These are areas where standard terms and conditions are sufficient to protect other land uses or resource values.	Total subsurface acreage with high development potential minus acreage in categories 2 and 3 below.	368,768	Total subsurface acreage with moderate development potential minus acreage in categories 2 and 3 below.	298,147
2. **Open Subject to Seasonal or Other Minor Constraints** These are areas where moderately restrictive lease stipulations (such as seasonal restrictions) may be required to mitigate impacts to other land uses or resource values.	* Kevin Rim * Sweet Grass Hills (East & West Buttes) area. * Crucial wildlife areas in the Havre Resource Area	249,445	* Crucial wildlife areas in the Havre Resource Area.	94,440
3. **Closed to Leasing** These are areas where other land uses or resource values cannot be adequately protected even with the most restrictive lease stipulations. Appropriate protection can only be ensured by closing the lands to leasing.	* UMNWSR * WSAs	77,416	* UMNWSR * WSAs	33,251
	TOTAL HIGH	695,629	TOTAL MODERATE	425,838

[1]BLM, 1987

Page 83, Column 1, Paragraph 8, Sentence 2

The habitat value of approximately 750 acres of crucial winter antelope range; 424 acres of crucial yearlong, and 2,640 acres of crucial spring sharptail grouse habitat; 1,900 acres of crucial spring/winter sage grouse habitat; 240 acres of crucial yearlong ring-necked pheasant habitat; 210 acres of crucial white-tailed deer habitat; 11,655 acres of high value, yearlong mule deer habitat; and one 39-acre wetland unit would decline if all 44,143 acres would be disposed of.

Page 83, Column 2, Paragraph 1, Delete Sentence 3

Page 83, Column 2, Paragraph 6, Additional Information At End Of Paragraph.

Raptor nesting sites would be disturbed during construction and maintenance of various lines, causing possible nest abandonment. Large transmission lines could also be hazardous to flying raptors. Impacts would be locally significant, but minor overall.

Page 84, Column 1, Paragraph 3, Sentence 1

Present hardrock and oil and gas activities are limited in the area so negative impacts to wildlife resources would be minor.

Page 85, Column 2, Paragraph 1, Sentence 5

Mining and other development in the area would seriously alter the solitude of the surrounding environs; making a religious experience difficult to obtain.

Page 87, Column 1, Paragraph 6, Sentence 6

Landownership transactions under Alternative A could result in the disposal of 44,143 acres of public lands.

Page 87, Column 2, Paragraph 2, Sentence 2

Denying surface disturbance within 1/4-mile of active threatened and endangered or sensitive raptor nest sites would present minimal restrictions for resource development and subsequently economic benefits.

Page 87, Column 2, Paragraph 3, Delete Sentences 3, 4, 5 and 6

Page 88, Column 1, Paragraph 1

A total of 50,117 acres of public land would be disposed of by sale and/or exchange in this alternative.*

*This change also applies to the following locations:

Page 88, Column 2, Paragraph 7
Page 89, Column 1, Paragraph 10
Page 90, Column 1, Paragraph 1
Page 91, Column 1, Paragraph 1
Page 92, Column 1, Paragraph 1
Page 93, Column 1, Paragraph 5
Page 94, Column 1, Paragraph 3

Page 88, Column 1, Paragraph 5

The locally significant, but moderate overall positive impacts would result from limiting ORV use in these sedimentary breaks soils because fragile and highly erodible soils would not be disturbed by ORVs and would not suffer accelerated erosion and loss of productivity.

Page 88, Column 1, Paragraph 6, Sentence 2

Locally significant negative impacts would occur in this area due to ORVs disturbing the soil and causing accelerated erosion and loss of productivity.

Page 88, Column 1, Paragraph 7, Sentence 1

The remainder of the planning area, 308,908 acres, would be open to ORV use.

Page 88, Column 2, Paragraph 12, Add To End Of Paragraph

This could be a locally significant impact.

Page 89, Column 1, Paragraph 1, Sentence 2

Locally significant, but moderate overall positive impacts would result from limiting ORV because of reduced disturbance on fragile and highly erodible soils and the reduction of accelerated erosion.

Page 89, Column 1, Paragraph 2, Sentence 2

Locally significant negative impacts would occur due to accelerated erosion.

Page 89, Column 2, Delete Paragraph 1

Page 89, Column 2, Paragraph 5

Denying surface disturbance within 1/4-mile of active threatened and endangered or sensitive raptor nesting sites could cause a minor impact to oil/gas exploration and development by requiring work to be delayed or routed differently.

Page 90, Table 4.2 Was Revised As Shown

TABLE 4.2
CONSTRAINTS ON OIL & GAS EXPLORATION & DEVELOPMENT (ALTERNATIVE B)[1]

Management Categories	High Development Potential	Acres	Moderate Development Potential	Acres
1. **Open Subject to Standard Terms and Conditions** These are areas where standard terms and conditions are sufficient to protect other land uses or resource values.	Total subsurface acreage with high development potential minus acreage in categories 2 and 3 below.	368,268	Total subsurface acreage with moderate development potential minus acreage in categories 2 and 3 below.	298,147
2. **Open Subject to Seasonal or Other Minor Constraints** These are areas where moderately restrictive lease stipulations (such as seasonal restrictions) may be required to mitigate impacts to other land uses or resource values.	* Kevin Rim area * Sweet Grass Hills (East & West Buttes) area plus the 529 acre withdrawal revocation on East Butte *Crucial wildlife areas in the Havre Resource Area	249,974	*Crucial wildlife areas in the Havre Resource Area	94,440
3. **Closed to Leasing** These are areas where other land use or resource values cannot be adequately protected even with the most restrictive lease stipulations. Appropriate protection can only be ensured by closing the lands to leasing.	*UMNWSR *WSAs	77,387	*UMNWSR *WSAs	33,251
	TOTAL HIGH	695,629	TOTAL MODERATE	425,838

[1]BLM, 1987

Page 90, Column 1, Paragraph 4, Sentence 1

Open ORV use on sedimentary soils of over 25% gradient would damage vegetation and indirectly increase soil erosion.

Page 90, Column 1, Paragraph 5, Sentence 1

Identification of an intensive ORV use area would completely eliminate vegetation on about 20 acres, which would be a locally significant negative impact.

Page 91, Column 1, Paragraph 4

Wildlife habitat on the 50,117 acres available for disposal includes: approximately 7,340 acres of crucial yearlong mule deer habitat; 405 acres of crucial antelope winter habitat; 200 acres of crucial ring-necked pheasant habitat; 1,210 acres of crucial spring sharp-tailed grouse; 730 acres of crucial winter/spring sage grouse habitat; and a 39 acre wetland tract.

Page 91, Column 1, Paragraph 5, Sentence 1

If the 50,117 acres are disposed of through sale, the 9,885 acres of crucial habitat described above would be lost; a moderate negative impact.

Page 91, Column 1, Paragraph 10, Additional Sentence

Right-of-way construction and maintenance activities would disturb nesting raptors; causing possible nest abandonment. Large transmission lines could also be hazardous to flying raptors. Impacts would be locally significant, but minor overall.

Page 91, Column 2, Paragraph 4, Sentence 1

Present hardrock and oil-gas activities are limited in the area so negative impacts to wildlife resources are minor.

Page 92, Column 1, Paragraph 2, Sentence 4

A total of 50,117 acres could be lost as trading stock for high value range resources.

Page 92, Column 1, Paragraph 3

ORV use on slopes over 25% gradient within watersheds would increase sedimentation in reservoirs below these areas and would damage livestock forage.

Page 92, Column 1, Paragraph 4, Sentence 1

About 20 acres of forage would be severely impacted under the projected use (about 2-4 AUMs); a locally significant negative impact.

Page 92, Column 2, Paragraph 1, Sentence 1

This alternative would result in the disposal of 50,117 acres of scattered tracts.

Page 93, Column 1, Paragraph 1, Sentence 5

Mining and other development in the area would seriously alter the solitude of the surrounding environs, making a religious experience difficult to obtain there.

Page 94, Column 2, Paragraph 1, Sentence 1

If exchanges were used as the only method of disposal, the exchange of 50,117 acres of public land for private and/or state lands would have a minor net fiscal impact on Payment In Lieu of Taxes, State Equalization Payments and annual county property tax revenues.

Page 94, Column 2, Paragraph 4, Last Sentence

These changes could have a minor impact to the local economy.

Page 94, Column 2, Paragraph 5

Denying disturbance activities within 1/4-mile of active threatened and endangered or sensitive raptor species nesting sites would present minimal restrictions for resource development and subsequently the associated economic benefits.

Page 95, Column 1, Paragraph 1

Grazing, oil/gas, mineral and other resource development would continue. Revoking the Bureau of Reclamation withdrawal on 529.67 acres and opening East Butte to mineral entry would offer more opportunities for mineral resource exploration and development. Economic impacts from mineral exploration and development are discussed under the Errata entry for page 79, column 2, paragraphs 4 and 5.

Page 95, Column 2, Paragraph 1, Sentence 1

This alternative provides for recreation developments by encouraging private sector initiatives in developing river management opportunities.

Page 96, Column 1, Paragraph 1,

A total of 15,689 acres of public land would be disposed of by sale and/or exchange in this alternative.*

*This change also applies to the following locations:

Page 96, Column 1, Paragraph 1
Page 96, Column 2, Paragraph 4, First Sentence
Page 97, Column 2, Paragraph 2
Page 99, Column 1, Paragraph 3
Page 99, Column 2, Paragraph 7
Page 100, Column 2, Paragraph 5
Page 102, Column 1, Paragraph 5

Page 96, Column 1, Delete Paragraph 5

Page 96, Column 1, Paragraph 6

This alternative limits vehicular use to existing roads and trails on 317,190 acres of sedimentary breaks soils. Locally significant, but moderate overall positive impacts would result from limiting ORV use on sedimentary breaks soils and riparian areas because the fragile and highly erodible soils would not be disturbed by ORVs and would not suffer accelerated erosion and loss of productivity.

Page 96, Column 1, Paragraph 7, Sentence 1

The remainder of the planning area, 197,299 acres, would be open to ORV use.

Page 96, Column 2, Paragraph 7

The impacts of ORV use are especially evident on sedimentary breaks type soils (soil subgroups 3, 4, 5, 16), soils with slopes greater than 25% (Appendix 2.5) and riparian areas. These areas, along with ACECs, WSAs, and important wildlife areas total 317,190 acres and would be restricted from ORV use. The locally significant, but moderate overall positive benefits would result from the lack of disturbance on fragile and highly erodible soils and reduction of accelerated erosion.

Page 96, Column 2, Delete Paragraph 8

Page 97, Column 1, Delete Paragraph 1

Page 97, Column 1, Paragraph 2, Sentence 1

The remainder of the planning area, 197,299 acres, would be open to ORV use.

Page 97, Column 1, Paragraph 3, Sentence 2

Extensive use areas may require mechanical treatment and seeding in addition to restricted ORV use.

Page 97, Column 2, Delete Paragraphs 3 and 4

Page 97, Column 2, Delete Paragraph 5, Sentence 1

Page 98, Table 4.3 Was Revised As Shown

TABLE 4.3
CONSTRAINTS ON OIL AND GAS EXPLORATION AND DEVELOPMENT (ALTERNATIVE C)[1]

Management Categories	High Development Potential	Acres	Moderate Development Potential	Acres
1. **Open Subject to Standard Terms and Conditions** These are areas where standard terms and conditions are sufficient to protect other land uses or resource values.	Total subsurface acreage with high development potential minus acreage in categories 2 and 3 below.	353,291	Total subsurface acreage with moderate development potential minus acreage in categories 2 and 3 below.	297,779
2. **Open Subject to Seasonal or Other Minor Constraints** These are areas where moderately restrictive lease stipulations (such as seasonal restrictions) may be required to mitigate impacts to other land uses or resource values.	* Kevin Rim area * Sweet Grass Hills (East & West Buttes) area outside ACEC * Cow Creek Corridor ACEC * Crucial wildlife areas in the Havre Resource Area	257,365	* A small portion of Cow Creek Corridor ACEC * Crucial wildlife areas in the Havre Resource Area	94,808
3. **Closed to Leasing** These are areas where other land uses or resource values cannot be adequately protected even with the most restrictive lease stipulations. Appropriate protection can only be ensured by closing the lands to leasing.	* UMNWSR * WSAs Sweet Grass Hills (East, West, & Middle Buttes) ACEC including the 529 acre BR revocation on East Butte	85,023	* UMNWSR * WSAs	33,251
	TOTAL HIGH	695,629	TOTAL MODERATE	425,838

[1]BLM, 1987

Page 98, Column 1, Delete Paragraphs 2 and 3

Page 98, Column 2, Paragraph 3, Sentences 2 & 3

Existing claims could still be worked and proceed to patent under this alternative. The need to wait for formal approval from two separate agencies (BLM and DSL) would be a moderate negative impact to operators and affect the development of mineral resources.

Page 99, Column 1, Delete Paragraph 1

Page 99, Column 1, Paragraph 8

ORV management would allow for maximum protection of vegetation. Sedimentary soils and riparian areas would be protected by limiting vehicle use to existing roads and trails. In addition, vehicle use would be prohibited on these roads and trails during the wet season.

Page 100, Column 1, Paragraph 2

The 15,689 acres of land identified for disposal contains the following habitat: 345 acres of crucial spring sharp-tail grouse habitat, 80 acres of crucial winter/spring sage grouse habitat, 200 acres of crucial ring-necked pheasant habitat and a 39-acre wetland unit.

Page 100, Column 1, Paragraph 3, Sentence 2

A moderate negative impact could occur if these 15,689 acres were sold because the 625 acres of crucial habitat described above would be lost.

Page 100, Column 1, Paragraph 9

Restrictions placed on mineral leases and land authorizations on the Kevin Rim would reduce the amount and intensity of disturbance to raptors. Limiting new ROWs to the west side of Kevin Rim would provide added protection for nesting raptors and increase the potential for successful peregrine falcon hacking. Hunting areas used by raptors would be protected east of the escarpment. These impacts would create locally significant, but minor overall positive impacts.

Page 100, Column 2, Paragraph 1, Sentences 2 and 3

A large open pit operation developed on valid existing rights could have long-term significant negative impacts on big game by reducing habitat.

Page 100, Column 2, Paragraph 6, Sentence 4

Approximately 15,689 acres could be lost as trading stock for high value range resources.

Page 101, Column 1, Paragraph 9, Sentence 1

This alternative would dispose of 15,689 acres of isolated land, resulting in the loss of about 138 archaeological and historical sites.

Page 101, Column 2, Paragraph 2, Delete Sentences 4 and 5

Page 102, Column 1, Paragraph 1, Sentences 3 and 4

Overall, such disturbance would be a minor negative impact. However, increased public awareness, via the development of interpretive sites, would enhance cultural resources along the Missouri River and would be a moderate positive impact.

Page 102, Column 1, Delete Paragraph 3

Page 103, Column 1, Paragraph 3, Sentences 1 and 2

Landownership transactions under this alternative could result in the disposal of 15,689 acres of public land. If exchanges were used as the only method of disposal, the exchange of 15,689 acres of public land for private and/or state land would have a minor net fiscal effect on Payment In Lieu of Taxes, State Equalization Payments and annual county property tax revenues.

Page 103, Column 1, Paragraph 5, Insert After 1st Sentence

This could have a locally moderate negative impact on the mineral and utility industries, but would only have a minor overall impact to the local economy of the planning area.

Page 103, Column 1, Paragraph 5, Sentence 3

Prohibiting location of communication sites on West and Middle Buttes of the Sweet Grass Hills would probably have little or no impact to industry because East Butte would remain open to communication site location.

Page 103, Column 2, Paragraph 2, Sentences 2 and 3

Timing or distance restrictions around active raptor or peregrine nest sites could restrict resource development and subsequently the associated economic benefits. While these restrictions would result in time delays and increased operating costs to oil and gas development overall in the area, they would create only a minor impact to the economy in the planning area.

Page 103, Column 2, Paragraph 3

Managing the Sweet Grass Hills under special management guidelines would not preclude utilization of the area for grazing, recreation and oil and gas activities, but would preclude the potential for some mineral resource development and subsequently the associated economic benefits. Economic impacts from mineral exploration and development are discussed under the Errata entry for page 79, column 2, paragraphs 4 and 5. Some ranch operations could experience a disruption of current grazing practices with a change in grazing management to emphasize maintenance of elk winter habitat. There would be no significant change in current economic and social trends. These changes would create minor impacts to the local economy.

Page 104, Column 2, Paragragh 1

This alternative would provide the opportunity for private sector development with limits on the type and intensity. Annual revenue for concessions and local businesses could increase in the long-term, but this impact would be minor.

Page 105, Column 1, Delete Paragraph 3

Page 105, Column 1, Paragraph 1, Second Sentence

Potentially, 15,689 acres could be disposed of by exchange or sale. An additional 34,428 acres could be exchanged or if they meet FLPMA sale criteria, sold.*

*This change also applies to the following locations.

Page 105, Column 2, Paragraph 6
Page 106, Column 2, Paragraph 6
Page 108, Column 1, Paragraph 4, 1st Sentence
Page 109, Column 2, Paragraph 4, 1st Sentence
Page 111, Column 2, Paragraph 10, 1st Sentence

Page 105, Column 1, Paragraph 4

This alternative limits vehicular use to existing roads year long on 118,156 acres and seasonally on 199,034 acres (April 1 to November 1) of sedimentary breaks soils and riparian areas. Locally significant, but moderate overall positive impacts would result from limiting ORV use because the fragile and highly erodible soils would not be disturbed by ORVs and would not suffer accelerated erosion and loss of productivity.

Page 105, Column 1, Paragraph 5, Sentence 1

Impacts would not be expected on the 199,034 acres of sedimentary breaks type soils which would be open to ORV use from November 1 to April 1. Soils would normally be frozen during this period and impacts would be minor.

Page 105, Column 1, Paragraph 6, Sentence 1

The remainder of the planning area, 197,984 acres, would be open to ORV use.

Page 105, Column 2, Paragraph 5, Sentence 3

This alternative would produce few negative impacts because developments would be mitigated to protect soils and other natural resources.

Page 105, Column 2, Paragraph 7, Sentence 4

Potentially 50,117 acres could be exchanged or sold for other lands in special management areas and other areas of high resource values.

Page 106, Column 1, Paragraph 4

This alternative limits vehicular use to designated roads and trails year long on 118,156 acres and seasonally (April 1 to November 1) on 199,034 acres of sedimentary soils. Locally significant, but moderate overall positive benefits would result because of the reduced disturbance on fragile and highly erodible soils and the reduction of accelerated erosion.

Page 106, Column 1, Paragraph 5, Sentence 2

No significant impacts would be expected.

Page 106, Column 1, Paragraph 6, Sentence 1

The remainder of the planning area, 197,984 acres, would be open to ORV use.

Page 106, Column 2, Delete Paragraph 7

Page 107, Table 4.4 was revised as shown

TABLE 4.4
CONSTRAINTS ON OIL & GAS EXPLORATION & DEVELOPMENT (ALTERNATIVE D)[1]

Management Categories	High Development Potential	Acres	Moderate Development Potential	Acres
1. **Open Subject to Standard Terms and Conditions** These are areas where standard terms and conditions are sufficient to protect other land uses or resource values.	Total subsurface acreage with high development potential minus acreage in categories 2 and 3 below.	353,921	Total subsurface acreage with moderate development potential minus acreage in categories 2 and 3 below.	297,779
2. **Open Subject to Seasonal or Other Minor Constraints** These are areas where moderately restrictive lease stipulations (such as seasonal restrictions) may be required to mitigate impacts to other land uses or resource values.	* Kevin Rim Area Sweet Grass Hills (East & West Buttes) area including the 529 acre BR revocation * Cow Creek ACEC * Crucial wildlife areas in the Havre Resource Area	264,321	* A small portion of Cow Creek ACEC * Crucial wildlife areas in the Havre Resource Area	94,808
3. **Closed to Leasing** These are areas where other land uses or resource values cannot be adequately protected even with the most restrictive lease stipulations. Appropriate protection can only be ensured by closing the lands to leasing.	* WSAs * UMNWSR	77,387	* WSAs * UMNWSR	33,251
	TOTAL HIGH	695,629	TOTAL MODERATE	425,838

[1]BLM, 1987

Page 107, Column 1, Paragraph 2, Sentence 1

Locatable mineral development authorization for roads, pipelines, powerlines, ditches, etc. would be included in a properly filed Notice or an approved Plan under the surface management regulations (43 CFR 3809).

Page 107, Column 2, Delete Paragraph 1

Page 107, Column 2, Paragraph 3, Last Sentence

The additional workload involved in Plan preparation, over that of a Notice and the need to wait for formal approval would be a minor negative impact to operators and development of the mineral resources.

Page 108, Column 1, Paragraph 1, Sentence 3

Opening these lands to mineral entry would allow exploration activities that would more accurately assess the development potential of these lands, and would provide for the extraction of any economic deposits discovered.

Page 108, Column 1, Paragraph 3, Sentence 2

This would be a minor impact because there is little locatable mineral potential.

Page 108, Column 1, Paragraph 4, Sentence 4

This situation would be permanent on 15,689 acres which could be disposed of, since this acreage might be sold without acquisition, even though exchange would still be the preferred method and disposal.

Page 108, Column 1, Paragraph 6, Replace Last Sentence

Restrictions on ORV use to protect vegetation and other resources would create moderate benefits for vegetation.

Page 108, Column 1, Paragraph 7

Impacts to vegetation resulting from ROW location would be moderately beneficial under this alternative because ROWs would be excluded in several areas and avoided in a number of others. Denying use of West and Middle Buttes of the Sweet Grass Hills as communication sites would protect vegetation on this site from disturbance related to site construction.

Vegetation would benefit from limiting impacts such as physical trampling or removal of vegetation and indirect damage by increasing soil erosion and compaction.

Page 108, Column 2, Paragraph 2, Sentence 2

Opening 529.67 acres on East Butte to mineral entry may lead to the loss of some vegetation through trampling or indirectly by soil erosion resulting from soil disturbance.

Page 108, Column 2, Paragraph 7, 1st Sentence

Under this alternative, 15,689 acres would be available for disposal through exchange or sale.

Page 108, Column 2, Paragraph 8, Sentence 1 and 2

An additional 34,428 acres would be available for disposal through exchange and possibly sale, if parcels meet Federal Land Policy & Management Act sale criteria. These lands provide the following crucial wildlife habitats: 7,340 acres of crucial year long mule deer habitat; 405 acres of antelope winter habitat; 865 acres spring sharp-tailed grouse habitat; and 650 acres winter/spring sage grouse habitat.

Page 109, Column 1, Paragraph 2, Sentence 1 and 2

A moderate negative impact to 625 acres of crucial wildlife habitat could occur, if the 15,689 acres were disposed of. A moderate negative impact could occur to an additional 9,260 acres if 34,428 acres are sold or exchanged and land uses change.

Page 109, Column 1, Paragraph 7, Sentence 1

Wildlife would benefit by avoiding or excluding ROWs in wilderness study areas, the Cow Creek area, the Missouri River Corridor, and the West and Middle Buttes of the Sweet Grass Hills.

Page 109, Column 1, Paragraph 8, Sentence 2

Identifying ROW corridors and widths at the activity plan level would limit disturbance in the remaining areas of the rim.

Page 109, Column 2, Paragraph 1, Sentence 5

Opening 529.67 acres of land on East Butte to minerals entry could create a new disturbance to elk, raptors, and deer in this area.

Page 109, Column 2, Paragraphs 4 and 5

The 15,689 acres, and possibly an additional 34,428 acres not yet inventoried, could be disposed of through sale, exchange, or other means. Less than full implementation of the land tenure objectives, or disposal other than by exchange, the preferred method, would moderately decrease the opportunities for improved grazing management opportunities.

Page 109, Column 2, Delete Paragraph 5

Page 109, Column 2, Paragraph 6, Sentence 2

The 50,117 acres would be the maximum amount that could be disposed of through exchange.

Page 110, Column 1, Paragraph 6, Sentences 1, 2 and 3

Disposal through exchange or sale of 15,689 acres could affect 138 sites. Approximately 27 of these sites would be valuable enough to warrant retention. Exchange or sale (if the area meets Federal Land Policy & Management Act sale criteria) of an additional 34,428 acres may affect approximately 305 sites of undetermined value. Of these sites, about 61 might be valuable enough to warrant retention.

Page 110, Column 2, Paragraph 2, Sentence 2

Prohibiting communication site location on West and Middle Buttes of the Sweet Grass Hills would decrease the potential of disturbing traditional Native American religious practices or cultural sites.

Page 110, Column 2, Paragraph 4, Sentence 3

However, significant impacts would continue to occur to both cultural and religious sites because hardrock mineral activity, as described in Alternative A, would continue.

Page 110, Column 2, Paragraph 5, Sentence 2

This would be a significant negative impact because the lands could then be disturbed by hardrock mineral activity.

Page 111, Column 1, Paragraph 2, Sentence 1

Providing 15,689 acres for disposal through sale or exchange and an additional 34,428 acres for disposal through exchange and possibly sale, would include 6,440 acres of public lands which currently have public access.

Page 111, Column 2, Paragraph 10, Sentence 2

If exchanges were used as the only method of disposal, the exchange of 50,117 acres of public lands for private and/or state lands would have a minor net fiscal affect on Payment In Lieu Of Taxes, State Equalization Payments and annual county property tax revenues.

Page 112, Column 1, Paragraph 3

The designation of avoidance and exclusion areas could cause a utility or transportation corridor to take a longer route, and thus increase the cost of construction for transmission lines. The actual impact cannot be assessed further without specific details of a proposed corridor. With East Butte an established communication site, denying location of communication sites on Middle and West Buttes of the Sweet Grass Hills would probably have little impact on development of future communication sites. All other areas open to rights-of-way location would not limit or curtail utility corridor development for transmission lines or the development of communication sites. These changes could have a locally moderate impact on the mineral and utility industries but would only have a minor impact overall to the local economy in the planning area.

Page 112, Column 1, Paragraph 4

Managing Kevin Rim under special management guidelines would not preclude utilizing the area for grazing, recreation, oil/gas, mineral and other resource development, but would restrict activities in sensitive areas. Timing restrictions or distance restrictions around active raptor or peregrine nest sites could restrict resource development and subsequently the associated economic benefits. While these restrictions would result in time delays and increased operating costs to oil and gas development overall in the area, they would create only a minor impact to the economy in the planning area.

Page 112, Column 1, Paragraph 5

Managing the Sweet Grass Hills under special management guidelines would not preclude utilizing the area for grazing, recreation, oil/gas, and mineral resource development and subsequently the associated economic benefits. Economic impacts from mineral exploration and development are discussed under Impacts Common to All Alternatives in the Chapter 4 Errata portion of this document. Some ranch operations could experience a disruption of current grazing practices with a change in grazing management to emphasize maintenance of elk winter habitat. There would be no significant change in current economic and social trends, but these changes could have a minor impact to the local economy.

Page 112, Column 2, Paragraph 6, Sentence 1

This alternative provides for some recreation developments and encourages private sector initiatives in developing river management opportunities.

Page 113, Column 1, Paragraph 1, Sentence 1

Sedimentary breaks soils designated open, would receive locally significant impacts due to the development of trail-road erosion, travel on wet soils, wind erosion on sandy soils and increased water erosion during wet periods.

Page 113, Column 1, Paragraph 1, Last Sentence

Limitations on ORV use of some sedimentary soils (148,335 acres) would create a locally significant, but moderate overall positive impacts due to protection of easily disturbed soils.

Page 113, Column 1, Paragraph 2

Construction and maintenance of ROW facilities in high erosion susceptibility areas (shallow soils, slopes greater than 25% sparse native vegetation, and slumping and mass wasting areas 100,000 acres) could cause locally significant long-term damages.

Page 113, Column 1, Paragraph 3, Sentence 1

Locally significant negative impacts could occur from open ORV use on 168,855 acres of sedimentary soils and riparian areas.

Page 113, Column 1, Paragraph 3, Sentence 3

ORV limitations on 148,335 acres would create locally significant, but moderate overall impacts by protecting easily disturbed soils. ROW location on steep sedimentary soils and riparian areas (comprising about 100,000 acres) could create locally significant runoff problems.

Page 113, Column 1, Paragraphs 5 and 6

Permitting locatable minerals exploration and development on 529.67 acres of a currently withdrawn area in the Sweet Grass Hills would be a significant positive impact to the minerals industry, due to the high potential for mineral occurrence.

Page 113, Column 1, Paragraph 7

The disposal of 44,143 acres could result in a moderate loss of native vegetation. Intensive ORV use on 6 acres could be locally significant. Significant adverse impacts to riparian areas could occur. A major hardrock mining development in the Sweet Grass Hills could significantly damage vegetation in a localized area.

Page 113, Column 1, Paragraphs 9, 10 and 11

There could be a long-term loss or gain of crucial habitat through land disposal actions. Nesting raptors would be significantly damaged by long-term surface disturbing activities on the Kevin Rim.

Potential large mining operations in the Sweet Grass Hills may create long-term significant damage to elk habitat and populations.

Grazing

A long-term improvement in management opportunities may be possible through disposal of 44,143 acres, primarily through exchange.

Page 113, Column 2, Delete Paragraph 5

Page 113, Column 2, Paragraph 7

Increased soil and water erosion would occur locally over 285,190 acres because of ORV use on sedimentary soils. Limiting ORV use on 32,000 acres of sedimentary soils would create locally significant, but moderate overall impacts by protecting easily disturbed soils.

Page 113, Column 2, Paragraph 8

ROW siting could result in locally significant soil erosion and slumping in fragile environments with shale, steep slopes, and sparse vegetation and in riparian areas (72,000 acres). Reduced streambank stability and increased soil compaction around recreation facilities on the UMNWSR could be locally moderate.

Page 113, Column 2, Paragraph 9

Locally significant negative impacts would occur from open ORV use on 285,190 acres of sedimentary soils and riparian areas. ORV limitations on 32,000 acres would create locally significant, but moderate overall impacts by protecting easily disturbed soils. ROW location on steep sedimentary soils and riparian areas comprising about 72,000 acres could create locally significant runoff problems.

Page 113, Column 2, Paragraph 10

Continuing the no lease policy in the UMNWSR Corridor could result in federal oil and gas drainage by state and private wells. Permitting locatable minerals exploration and development on 529.67 acres of currently withdrawn area in the Sweet Grass Hills would be a locally significant positive mineral effect due to the high potential for mineral occurrence.

Page 114, Column 1, Paragraph 1, Insert After Sentence 2

Significant adverse impacts to riparian areas could occur. A major hardrock mining development in the Sweet Grass Hills could significantly damage vegetation in a localized area.

Page 114, Column 1, Paragraphs 2, 3 4, and 5

There could be a long-term loss or gain of crucial wildlife habitat through land disposal actions involving 50,117 acres. Wildlife could be stressed and habitat impacted in areas of sedimentary soils as a result of ORV use. Transmission lines would significantly impact raptors in localized areas. Nesting raptors would be significantly damaged by long-term disturbance activities on Kevin Rim. Potential large mining operations in the Sweet Grass Hills may create long-term significant damage to elk habitat and populations.

Grazing

A long-term improvement or loss of management opportunities may be possible through disposal of 50,117 acres, primarily through exchange.

Page 114, Column 1, Delete Paragraph 10

Page 114, Column 1, Paragraph 12

There would be a long-term positive impact on 317,190 acres, which includes areas of sedimentary breaks soils and riparian areas, where ORV use would be limited to roads, trails or ways.

Page 114, Column 2, Paragraph 3, Sentence 1

There would be a long-term positive impact on 317,190 acres, which includes areas of sedimentary breaks soils and riparian areas where ORV use would be limited to roads, trails and ways by reducing sedimentation of water in these areas.

Page 114, Column 2, Insert and End of Paragraph 3

Intensive riparian management would improve streambank stability and reduce sedimentation in the Cow Creek area.

Page 114, Column 2, Replaces Sentences 3 and 4 of Paragraph 4, and All Of Paragraphs 5 and 6

Routing pipelines around ROW exclusion and avoidance areas would result in moderate cost increases to industry in these locations. Implementation of special stipulations on Kevin Rim could increase costs due to delays. An additional workload to the mineral industry would result in cases of small (less than 5 acres) disturbances. Withdrawing the Sweet Grass Hills, including 529.67 acres currently withdrawn by Bureau of Reclamation, from new mineral entry would create a significant long-term impact to the mineral industry. Drainage of federal minerals in the UMNWSR and Sweet Grass Hills could result in a significant long-term impact.

Page 114, Column 2, Paragraph 7, Sentence 3

Major hardrock mining developments on valid, existing claims in the Sweet Grass Hills could significantly disturb vegetation in a localized area. Vegetation in Cow Creek would improve because of riparian enhancement.

Page 114, Column 2, Paragraph 8

Wildlife values could increase or decrease on 15,689 acres identified for disposal. Seasonal ORV restrictions would improve wildlife habitat. Implementation of special stipulations in Kevin Rim and Sweet Grass Hills would significantly improve conditions for raptor habitat. Larger hardrock mining developments on valid existing claims in the Sweet Grass Hills could reduce big game habitat. Improving riparian areas in Cow Creek would improve wildlife habitat.

Page 114, Column 2, Paragraph 9

A long-term improvement or loss of management opportunities could result through disposal of 15,689 acres.

Page 115, Column 1, Paragraph 1, Delete Sentences 1, 2 and 3

Page 115, Column 1, Insert At End Of Paragraph 1

Increased public awareness of cultural values in the Upper Missouri National Wild and Scenic River would reduce disturbance to cultural resources.

Page 115, Column 1, Insert At End Of Paragraph 2

Visual qualities would be enhanced or protected in Cow Creek.

Page 115, Column 1, Paragraph 3

Routing ROW facilities around exclusion or avoidance areas would increase costs. A moderate improvement in opportunities for Native Americans to utilize the Sweet Grass Hills for religious purposes would occur.

Page 115, Column 1, Move Paragraph 4, Sentence 1, From This Location

To Page 115, Column 2, After Paragraph 1

Page 115 Column 1, Paragraph 4, Delete Sentences 2 and 3 and Paragraph 5

Page 115, Column 1, Paragraph 6, Sentence 6

There would be a long-term positive impact on 317,190 acres, which includes areas of sedimentary breaks soil and riparian areas where ORV use would be limited to roads, trails or ways.

Page 115, Column 1, Paragraphs 9 and 10

There would be a long-term positive impact on 317,190 acres, which includes areas of sedimentary breaks soils and riparian areas, where ORV use would be limited to roads, trails and ways by reducing sedimentation of water in these areas. Locally significant decreases in water quality could result from increased erosion from seasonal ORV use of 199,034 acres of sedimentary soils. Increased sediment loads may occur because of ROW disturbance to some sedimentary soils. In Cow Creek, intensive riparian management would allow significant improvement of streambank stability and water quality.

Page 115, Column 2, Insert In Front Of Paragraph 1

Minerals

Routing pipelines around right-of-way exclusion and avoidance areas would result in moderate cost increases to industry in these locations. Implementation of special stipulations on Kevin Rim could increase costs due to delays. An additional workload to the mineral industry would result in cases of small (less than 5 acres) disturbances.

Page 115, Column 2, Insert Between Paragraphs 1 and 2

Continuing the no lease policy for oil and gas in the Upper Missouri National Wild and Scenic River Corridor could result in drainage of federal oil and gas by state and private wells.

Page 115, Column 2, Paragraphs 5, 6, 7 and 8

There could be a long-term loss or gain of crucial wildlife habitat through land disposal actions involving 50,117 acres. Seasonal off-road vehicle restrictions would improve wildlife habitat.

Implementing special stipulations in Kevin Rim and Sweet Grass Hills would significantly improve conditions for raptor habitat. Large hardrock mining developments in the Sweet Grass Hills could reduce big game habitat. Improving riparian areas in Cow Creek would improve wildlife habitat.

Page 115, Column 2, Paragraph 9

A long-term improvement or loss of management opportunities may be possible through disposal of 50,117 acres, primarily through exchange.

Page 115, Column 2, Insert After Paragraph 11

Increased public awareness of cultural values in the Upper Missouri National Wild and Scenic River would reduce disturbance to cultural resources.

Page 115, Column 2, Insert At End Of Paragraph 12

Visual qualities would be enhanced or protected in Cow Creek.

Page 115, Column 2, Add To Front Of Paragraph 14

Routing right-of-way facilities around exclusion or avoidance areas would increase costs.

Page 116, Column 1, Insert This Paragraph Before Paragraph 4

Off-road vehicle use within sedimentary breaks and riparian areas could result in increased sedimentation of adjacent and downstream waterways due to increased soil erosion.

Page 116, Column 1, Paragraph 5

Opening 529.67 acres, currently withdrawn in the Sweet Grass Hills to location and entry under the mining laws, would be a commitment of that mineral resource.

Page 116, Column 1, Paragraph 6

Off-road vehicle use of riparian areas and intensive use on 6 acres could create significant damage to vegetation in this area.

Page 116, Column 1, Paragraphs 7 and 8

Sedimentary breaks soils and glaciated prairie drainage soils could be significantly damaged by off-road vehicle use. Even limited off-road vehicle use on fragile soils would generally cause a drastic reduction in soil productivity and values. Locally significant damage to riparian soils could occur from off-road vehicle damage to streambanks and resultant increased wind and water erosion.

Locally significant soils damages would occur from right-of-way facilities construction-maintenance in high erosion susceptible areas, such as: shallow soils; slopes greater than 25%; sparse native vegetation; and slumping and mass wasting areas.

Page 116, Column 1, Insert This Paragraph Before Paragraph 9

Off-road vehicle use within sedimentary breaks and riparian areas could result in increased sedimentation of adjacent and downstream waterways due to increased soil erosion.

Page 116, Column 1, Paragraph 10

Permitting locatable mineral exploration and development on 529.67 acres of currently withdrawn area in the Sweet Grass Hills would be a commitment of that mineral resource.

Page 116, Column 2, Paragraph 1

Off-road vehicle use of riparian areas and intensive use on 20 acres could create significant damage to vegetation in this area.

Page 116, Column 2, Paragraph 3

Location of right-of-way facilities could result in locally significant impacts on sites which are not mitigatable.

Page 116, Column 2, Paragraph 5, Delete This Paragraph and Minerals Heading Above

Page 116, Column 2, Delete Paragraph 6 With Vegetation Heading Above

Page 116, Column 2, Paragraph 8

Location of right-of-way facilities could result in locally significant impacts on sites which are not mitigatable.

Page 116, Column 2, Paragraph 10

Permitting locatable mineral exploration and development on 529.67 acres of currently withdrawn area in the Sweet Grass Hills would be a commitment of that mineral resource.

Page 116, Column 2, Delete Paragraph 11 With Vegetation Heading Above

ACTIVITY PLANNING. Site-specific planning which precedes actual development. This is the most detailed level of BLM planning.

AIRSHED.

Class I Area. Any area which is designated for the most stringent degree of protection from future degradation of air quality. The Clean Air Act designates as mandatory Class I areas each national park over 6,000 acres and each national wilderness area over 5,000 acres.

Class II Area. Any area cleaner than federal air quality standards which is designated for a moderate degree of protection from future air quality degradation. Moderate increases in new pollution may be permitted in a Class II area.

Class III Area. Any area cleaner than federal air quality standards which is designated for a lesser degree of protection from future air quality degradation. Significant increases in new pollution may be permitted in Class III area.

ALLOTMENT. An area of land where one or more livestock operators graze their livestock. Allotments generally consist of BLM lands but may also include state owned and private lands. An allotment may include one or more separate pastures. Livestock numbers and seasons of use are specified for each allotment.

ALLOTMENT MANAGEMENT PLAN (AMP). A written program of livestock grazing management, including supportive measures if required, designed to attain specific management goals in a grazing allotment.

ANIMAL UNIT MONTH (AUM). A standardized measurement of the amount of forage necessary for the complete sustenance of one animal for one month; also the measurement of the privilege of grazing one animal for one month.

APPROVED TRANSPORTATION PLAN. A plan showing all existing and planned access routes needed to use, protect and administer the public lands.

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC). Areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

AVOIDANCE AREA. Land areas that pose particular land use or environmental impacts which would be difficult or impossible to mitigate. The corresponding definition for the Montana Major Facility Siting Act is a geographic area or location specified in ARM 36.7.2504, ARM 36.7.2533, and ARM 36.7.2535 where construction or operation of a facility will likely damage the significant environmental values peculiar to the area or where environmental constraints may pose siting or construction problems and where these values or constraints have received formal public recognition or designation or are in the process of being designated at the time the application if filed.

BROWSE. To browse is to graze a plant; also, browse (noun) is the tender shoots, twigs and leaves of trees and shrubs often used as food by cattle, deer, elk and other animals.

COMPACTION. The process of packing firmly and closely together; the state of being so packed, e.g., mechanical compaction of soil by livestock or vehicular activity. Soil compaction results from particles being pressed together so that the volume of the soil is reduced. It is influenced by the physical properties of the soil, moisture content and the type and amount of compactive effort.

CRITICAL HABITAT. Any habitat, which if lost, would appreciably decrease the likelihood of the survival and recovery of a threatened or endangered species, or a distinct segment of its population. Critical habitat may represent any portion of the present habitat of a listed species and may include additional areas for reasonable population expansion. Critical habitat must be officially designated as such by the Fish and Wildlife Service or the National Marine Fisheries Service.

CRUCIAL WILDLIFE HABITAT. Parts of the habitat necessary to sustain a wildlife population at critical periods of its life cycle. This is often a limiting factor on the population, such as breeding habitat, winter habitat, etc.

Glossary

CULTURAL RESOURCES. A term that includes items of historical, archaeological or architectural significance which are fragile, limited and non-renewable portions of the human environment.

CULTURAL SITE. Any location that includes prehistoric and/or historic evidence of human use.

DEVELOPED CAMPSITES. Areas with tent or trailer spaces, potable water, access roads, refuse containers, pit or chemical toilets and qualify for fee collection under the Land and Water Conservation Act of 1965.

DISPOSAL AREA. An area where public land generally will be made available for disposal through sales or exchanges or both. Some land may be retained in public ownership based on site-specific application of the land ownership adjustment criteria.

ENDANGERED OR THREATENED SPECIES. Determined for plants and animals by one or a combination of the following factors:

1. The present or threatened destruction, modification or curtailment of a species habitat or range.

2. Over-utilization of a species for commercial, sporting, scientific or educational purposes.

3. Disease or predation of the species.

4. The inadequacy of existing regulatory mechanisms.

5. Other natural or human caused factors affecting a species' continued existence.

ENVIRONMENTAL ASSESSMENT. A concise public document for which a Federal agency is responsible that serves to:

(1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.

(2) Aid an agency's compliance with the Act when no environmental impact statement is necessary.

(3) Facilitate preparation of a statement when one is necessary. Shall include brief discussions of the need for the proposal, of alternatives as required by Sec. 102(2)(e), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.

ENVIRONMENTAL IMPACT STATEMENT (EIS). A detailed written statement as required by Sec. 102(2)(C) of the National Environmental Protection Act.

EROSION SUSCEPTIBILITY. The susceptibility of a soil to erosion when no cover is present. The rate of soil displacement depends on the physical properties of the soil, rainfall intensity and slope gradient.

EXCHANGE. A conveyance of lands and interests therein from the United States to a person at the same time there is a conveyance of lands and interests therein from the person to the United States.

EXCLUSION AREAS. Land areas determined to be unavailable for corridor allocation or facility siting. Only those areas with a legal Congressional mandate that excludes linear facilities should be included. The corresponding definition for the Montana Major Facility Siting Act is a geographic area specified in ARM 36.7.2503 and ARM 36.7.2532 legally designated for its environmental values and having legally defined boundaries wherein facility construction or operation is prohibited, excepting those portions of the area where permission to site a facility has been obtained from the legislative or administrative unit of government with direct authority over the area.

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976 (FLPMA). Public Law 94-579, October 21, 1976, often referred to as the BLM's "Organic Act," which provides the majority of the BLM's legislated authority, direction, policy and basic management guidance.

FEE SIMPLE TITLE. An estate in which the owner is entitled to the entire property with unconditional power of disposition.

FOSSIL OF SIGNIFICANT SCIENTIFIC INTEREST. A fossil which is unique, rare or particularly well-preserved; is an unusual assemblage of common fossils; is of high scientific interest; or provides important new data.

GROUNDWATER. Water contained in pore spaces of consolidated and unconsolidated subsurface material.

INTERIM MANAGEMENT POLICY AND GUIDELINES FOR LANDS UNDER WILDERNESS REVIEW (IMP). A BLM Handbook H-8550-1 dated November 10, 1987, which defines the policy for management of Wilderness Study Areas until a final determination on wilderness designation is made by Congress.

ISOLATED TRACT. A tract of one or more contiguous legal subdivisions completely surrounded by lands held in non-Federal ownership or so effectively separated from other federally-owned lands by some permanent withdrawal or reservation as to make its use with such lands impracticable. A tract is considered isolated if the contiguous lands are all patented, even though there are other public lands cornering upon the tract. The term "cornering" refers to lands having a common survey corner but not a common boundary.

LEASABLE MINERALS. Those minerals or materials that can be leased from the federal government. Includes oil and gas, coal, phosphate, sodium, potash, and oil shale.

LINEAL RIGHTS-OF-WAY. Lineal rights-of-way are described in terms of length and width. The length will generally be a fixed statistic. Width, however, is more judgmental. Width multiplied by length equates to the right-of-way "area of use."

LOCATABLE MINERALS. Minerals or materials subject to disposal and development through the Mining Law of 1872 (as amended). Generally includes metallic minerals such as gold and silver and other materials not subject to lease or sale (some bentonites, limestone, talc, some zeolites, etc.).

MANAGEMENT ACTIONS. Any actions proposed to preserve a resource, increase or decrease production and/or use, regulate or minimize depletion of resources, or improve the conditions of a resource through application of professionally recognized methods, techniques, or treatments.

MANAGEMENT CLASSIFICATIONS (UPPER MISSOURI RIVER).

Wild: Those rivers or sections of river that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic: Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

Recreational: Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

MANAGEMENT FRAMEWORK PLAN (MFP). A planning decision document prepared before the effective date of the regulations implementing the land use planning provisions of the FLPMA, which establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, and objectives to be achieved for each class of land-use or protection. Until replaced by RMP's, MFP's, including those completed in the transition period, are used as a basis for management action as provided for in 43 CFR 1610.8.

MANAGEMENT SITUATION ANALYSIS (MSA). An unpublished companion document to this RMP that provides the background documentation for the development of alternatives. The MSA consists of the Resource Area Profile, Existing Management Situation, Existing Resource Situation, and Opportunity Analysis.

MECHANICAL TREATMENTS. Treatment by mechanical means of an area of range including contour furrowing, pitting, plowing and seeding, chiseling, scalping, water spreaders, etc. to accomplish desired objectives.

MITIGATION MEASURES. Methods or procedures committed to by BLM for the purpose of reducing or lessening the impacts of an action.

MONITOR. To watch or check. Rangeland resources are monitored for changes that occur as a result of management actions or practices.

MULTIPLE USE. Balanced management of the various surface and subsurface resources, without permanent impairment of the productivity of the land, that will best meet present and future needs.

NONDISCRETIONARY NO MINERAL ENTRY AREA. Those lands closed to mineral entry by formal regulation, legislation or withdrawal. Within these areas the BLM's legal authority to allow mineral entry is suspended.

OFFSITE WATER FACILITIES. The transport of water away from the source (well, spring, reservoir, etc.) via a pipeline to a stock watertank. The source would be exclosed to prevent damage and contamination by livestock and wildlife.

OFF-ROAD VEHICLE (ORV). Any motorized track or wheeled vehicle designed for cross-country travel over any type of natural terrain.

OFF-ROAD VEHICLE DESIGNATIONS.

Open: Designated areas and trails where off-road vehicles may be operated, subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343; or an area where all types of vehicle use is permitted at all times, subject to the standards in BLM Manuals 8341 and 8343.

Limited: Designated areas and trails where the use of off-road vehicles is subject to restrictions such as limiting the number or types or vehicles allowed, dates and times of use (seasonal restrictions), limiting use to existing roads and trails, or limiting use to designated roads and trails. Under the designated roads and trails designation, use would be allowed only on roads and trails that are signed for use.

Combinations of restrictions are possible such as limiting use to certain types of vehicles during certain times of the year.

Closed: Designated areas and trails where the use of off-road vehicles is permanently or temporarily prohibited. The use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer.

OFF-ROAD TRAIL. A route that accommodates 1 or 2 wheeled motorized or mechanical equipment.

PERMIT (GRAZING). An authorization that permits the grazing of a specified number and kind of livestock on a designated area of BLM lands for a period of time, usually not more than one year.

PLANNING CRITERIA. The factors used to guide development of the resource management plan, or revision, to ensure that it is tailored to the issue previously identified and to ensure that unnecessary data collection and analysis are avoided. Planning criteria are developed to guide the collection and use of inventory data and information, the analysis of the management situation, the design and formulation of alternatives, the estimation of the effects of alternatives, the evaluation of alternatives, and the selection of the preferred alternative.

PRIVATE INITIATIVES. BLM permitted management activities on public land that are funded by private industry such as concessions.

PUBLIC LANDS. Any land and interest in land (outside of Alaska) owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management.

PUBLIC PARTICIPATION. Part of BLM's planning system that provides the opportunity for citizens as individuals or groups to express local, regional, and national perspectives and concerns in the rule making, decision making, inventory and planning, processes for public lands. This includes public meetings, hearings, or advisory boards or panels that may review resource management proposals and offer suggestions or criticisms for the various alternatives considered.

RANGE CONDITION. The present state of vegetation of a range site in relation to the climax plant community of that site. It is an expression of the relative degree to which the kinds, proportions and amounts of plants in a plant community resemble that of the climax plant community for that site. Range condition is basically an ecological rating of the plant community. Air-dry weight is the unit of measure used in comparing the composition and production of the present plant community with that of the climax community.

RANGE DEVELOPMENT. A structure, excavation, treatment or development to rehabilitate, protect or improve public lands to advance range betterment. "Range Development" is synonymous with "Range Improvement."

RANGE FACILITIES. Any structure or excavation such as water sources, shade sources, oilers, etc. designed to facilitate range management.

RANGE SITE. A distinctive kind of rangeland that differs from other kinds of rangeland in its ability to produce a characteristic natural plant community. A range site is the product of all the environmental factors responsible for its development. It is capable of supporting a native plant community typified by an association of species that differs from that of other range sites in the kind or proportion of species or in total production.

RANGE TREND. The direction of change in range condition and soil.

RECREATION AND PUBLIC PURPOSES ACT (R&PP ACT). This act authorizes the Secretary of the Interior to lease or convey public lands for recreational and public purposes under specified conditions of states or their political subdivisions, and to nonprofit corporations and associations.

RESOURCE MANAGEMENT PLAN. The system that provides a step-by-step process for considering multiple resource values, resolving conflicts, and making resource management decisions.

RESOURCE OBJECTIVES. The desired state or condition that a resource management policy or program is designed to achieve. A goal is usually not quantifiable and may not have a specific date by which it is to be completed. Goals are the basis from which objectives are developed.

RETENTION AREA. An area where public land will generally remain in public ownership and be managed by the BLM. Transfers to other public agencies will be considered where improved management efficiency would result. Minor adjustments involving sales or exchanges or both may be permitted based on site-specific application of the land ownership adjustment criteria.

RIPARIAN AREA. A specialized form of wetland with characteristic vegetation restricted to areas along, adjacent to or contiguous with rivers and streams, also, periodically, flooded lake and reservoir shore areas, as well as lakes with stable water levels.

ROAD. A two-track established from use of four-wheeled vehicles over a period of time; or a route constructed for access by four-wheeled motorized vehicles larger than 40" in width but not maintained annually; or a route maintained periodically for access by four-wheeled vehicles larger than 40" in width.

RUNOFF. The water that flows on the land surface from an area in response to rainfall or snowmelt. As used in this EIS, runoff from an area becomes streamflow when it reaches a channel.

SALEABLE MINERALS. High volume, low value mineral resources including common varieties of rock, clay, decorative stone, sand and gravel.

SEASON OF USE. The time of livestock grazing on a range area based on type of vegetation or stage of vegetative growth.

SEASONAL (SEASON LONG) GRAZING. Grazing use throughout a specific season.

SEDIMENT. Soil, rock particles and organic or other debris carried from one place to another by wind, water or gravity.

SEDIMENTATION. The action or process of deposition of material borne by water, wind or glacier.

SEGREGATION. The removal for a limited period, subject to valid existing rights, of a specified area of the public lands from the operation of the public land laws, including the mining laws, pursuant to the exercise by the Secretary of the Interior of regulatory authority as conferred by law to allow for the orderly administration of the public lands.

SEMI-DEVELOPED CAMPSITES. Areas with some capital improvements and camping use is fairly frequent.

SENSITIVE SPECIES. Animals/plants not yet listed as endangered or threatened, but that are undergoing a status review. This may include animals/plants whose populations are consistently and widely dispersed or whose ranges are restricted to a few localities, so that any major habitat change could lead to extinction. A species that is particularly sensitive to some external disturbance factors.

SOIL. The unconsolidated mineral material on the immediate surface of the earth that serves as a natural medium for the growth of land plants.

SOIL MOISTURE. Water held in the root zone by capillary action. Part of the soil moisture is available to plants, part is held too tightly by capillary or molecular forces to be removed by plants.

SPECIAL STIPULATIONS. These are conditions or requirements attached to a lease or contract that apply in addition to standard stipulations (see below). They frequently provide additional protection of the environment from resource developments, e.g., coal mining, oil and gas development. Special stipulations become effective by their specification on a RMP.

SPECIES OF SPECIAL INTEREST OR CONCERN. Species not yet listed as "endangered or threatened" but whose status is being reviewed because of their widely dispersed populations or their restricted ranges. A species whose population is particularly sensitive to external disturbance.

STABILIZED. To reduce accelerated erosion rates to natural geologic erosion rates.

STANDARD STIPULATIONS. These are conditions or requirements attached to a lease or contract that detail specific actions to be taken or avoided during resource development, e.g., coal mining, oil and gas development. They usually provide basic protection of the environment.

STREAMBANK (and CHANNEL) EROSION. This is the removal and transport of material by concentrated flows.

THREATENED SPECIES. A species that the Secretary of Interior has determined to be likely to become endangered within the foreseeable future throughout all or most of its range. See also "Endangered or Threatened Species."

TOTAL DISSOLVED SOLIDS. The dry weight of dissolved material, organic and inorganic, contained in water.

TRAIL. A route that accommodates non-motorized use, or motorized equipment that is less than 40" wide.

UNDEVELOPED CAMPSITES. Primitive camping areas used on a regular basis, but lacking capital improvements (i.e., pit toilets).

UNECONOMICAL. Wasting time, resources and capital on the management of outputs and related activities that have very limited benefits accruing within a time period.

UNNECESSARY OR UNDUE DEGRADATION. Surface disturbance greater than what would normally result when an activity is being accomplished by a prudent operator in usual, customary, and proficient operations of similar character and taking into consideration the effects of operations on other resources and land uses, including those resources and uses outside the area of operations.

VALID EXISTING RIGHTS. Legal interests that attach to a land or mineral estate that cannot be divested from the estate until that interest expires or is relinquished.

VEGETATION (GROUND) COVER. The percent of land surface covered by all living vegetation (and remnant vegetation yet to decompose) within 20 feet of the ground.

VISION QUEST SITE. A cradle like structure, usually located on elevated places, that relates to a Native American religious ceremony through which an individual gains a spiritual guide.

VISUAL RESOURCE MANAGEMENT CLASSES. The degree of acceptable visual changes within a characteristic landscape. A class is based upon the physical and sociological characteristics of any given homogeneous area and serves as a management objective.

Class I areas (preservation) provide for natural ecological changes only. This class includes primitive areas, some natural areas, some wild and scenic rivers and other similar sites where landscape modification activities should be restricted.

Class II (retention of the landscape character) includes areas where changes in any of the basic elements (form, line, color or texture) caused by management activity should not be evident in the characteristic landscape.

Class III (particle retention of the landscape character) includes areas where changes in the basic elements (form, line, color or texture) caused by management activity may be evident in the characteristic landscape. However, the changes should remain subordinate to the visual strength of the existing character.

Class IV (modification of the landscape character) includes areas where changes may subordinate the original composition and character; however, they should reflect what could be a natural occurrence within the characteristic landscape.

Class V (rehabilitation or enhancement of the landscape character) includes areas where change is needed. This class applies to areas where the landscape character has been so disturbed that rehabilitation is needed. This class would apply to areas where the quality class has been reduced because of unacceptable intrusions. It should be considered an interim short-term classification until one of the other classes can be reached through rehabilitation or enhancement.

WATER QUALITY. The chemical, physical and biological characteristics of water with respect to its suitability for a particular use.

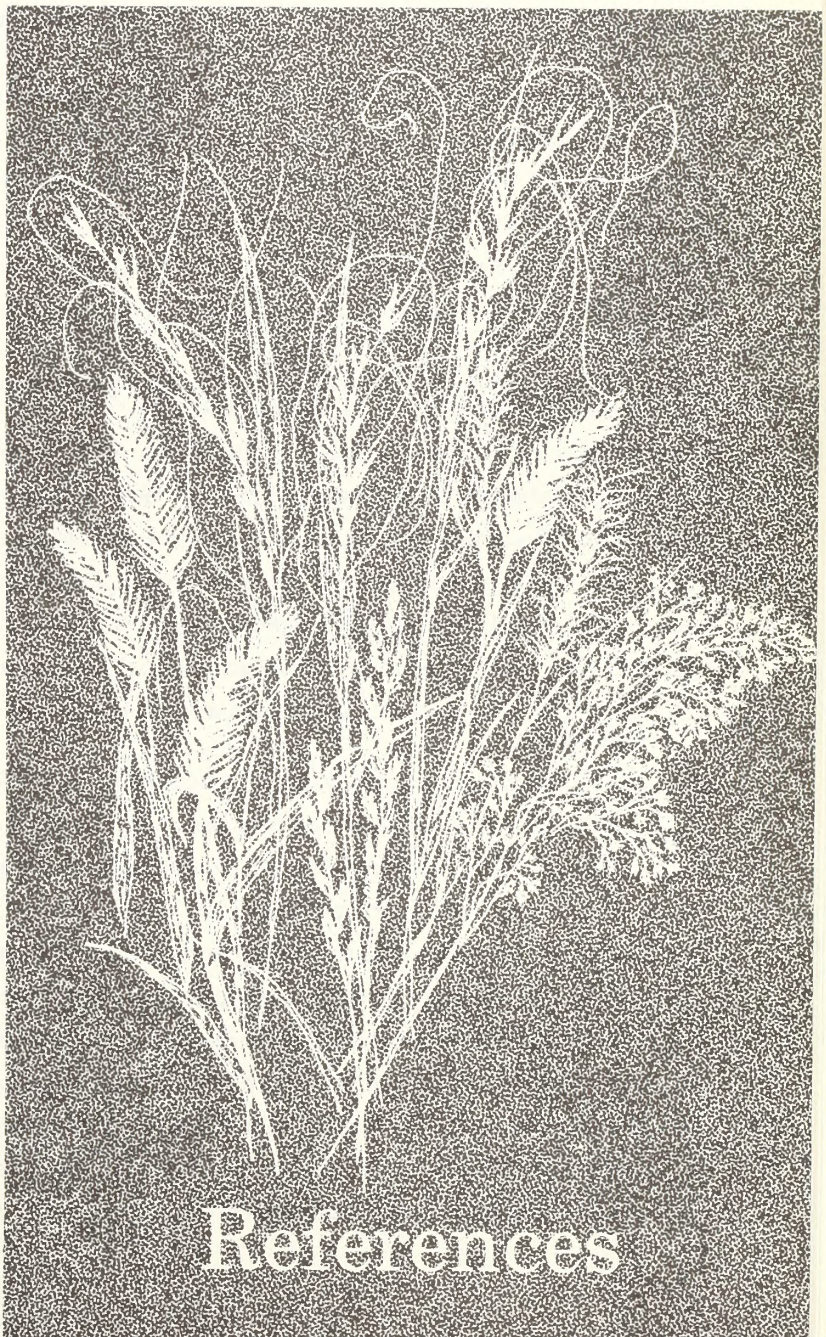
WATERSHED. All lands which are enclosed by a continuous hydrologic drainage divide and lie upslope from a specified point on a stream.

WETLANDS. Those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.

WILDERNESS STUDY AREA (WSA). An area determined to have wilderness characteristics. Study areas will be subject to interdisciplinary analysis and public comment to determine wilderness suitability. Suitable areas will be recommended to the President and Congress for wilderness designation.

WINDOWS. Usually short narrow passageways through constrained areas which are the most feasible potential locations for linear facilities, considering engineering and/or environmental factors.

WOODLANDS. Forestland not included in the commercial forestland sustainable harvest level. Includes all non-commercial and non-suitable forestland.



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Appendix

APPENDIX 1.1: ACQUISITION, RETENTION AND DISPOSAL CRITERIA

Supplement to State Director Guidance, June 1984 - Land Pattern Review and Land Adjustment

A. Acquisition Criteria

1. Facilitate access to areas retained for long term public use.

2. Enhance Congressionally designated areas, rivers, or trails.

3. Be primarily focused in the "retention" areas. Acquisition outside the retention areas will only be considered if the action leads to and/or facilitates long term needs or program objectives.

4. Facilitate national, state and local BLM priorities or mission statement needs.

5. Place emphasis where BLM land use or activity plans are completed. Proposals must facilitate implementation and/or be consistent with these plans.

6. Stabilize or enhance local economies or values.

7. Meet long term public land management goals as opposed to short term.

8. Be of sufficient size to improve use of adjoining public lands or, if isolated, large enough to allow the identified potential public land use.

9. Allow more diverse use, more intensive use, or a change in uses to better fulfill the Bureau's mission.

10. Enhance the opportunity for new or emerging public land uses or values.

11. Contribute to a wide spectrum of uses or large number of public land users.

12. Facilitate management practices, uses, scale of operations or degrees of management intensity that are viable under economic program efficiency standards.

13. Secure for the public significant water related land interests. These interests will include lake shore, river front, stream, pond or spring sites.

Program Specific Acquisition Criteria

Minerals

1. Consolidation of mineral estates -- from the minerals program viewpoint this is probably the most important reason for acquisition. The primary purpose for consolidation of estates is improvement of potential for development while improving resource management and economic values.

   This concept can be applied to some deposits of coal, phosphate, potash, oil shale and tar sands. It is difficult to envision that this approach would be useful for oil and gas or locatable minerals.

2. Acquisition in response to a Federal project need, as in the case of a dam project. Criteria for this type of acquisition would generally include:

   a. Where development of the Federal project would preclude the mineral estate owner from exercising development rights; or

   b. Where the exercise of the mineral estate owners right of development would materially interfere with the Federal project.

3. Acquisition mandated by law. The best example of this would be where an alluvial valley floor has precluded coal mining, triggering an exchange.

Livestock Management

Acquire non-Federal holdings in key allotments which will enhance manageability and investment opportunity in improvement and maintenance category allotments.

Timber Management

Focus acquisition priority on areas:

1. Which exceed 30 cu. ft./acre in growth of commercial timber unless the areas will enhance the harvest of adjacent lands. In this case, the standard may be lowered to 20 cu. ft./acre in annual growth.

2. Contiguous to, or which facilitate access to public forest land.

3. Containing 80 acres or more of commercial timber. If less than 80 acres, the tract(s) must be logical logging unit(s) or facilitate commercial management of adjacent public forest land.

4. Containing enough harvestable volume for a feasible commercial logging unit after physical, biological or other land use constraints are considered.

Recreation

Acquire lands with the following significant public values:

1. National Values

   a. Congressionally designated areas/rivers/trails

   b. Congressionally designated study areas/rivers/trails

2. State Values

   a. Select lands that enhance state recreation trails and waterways (see State Comprehensive Outdoor Recreation Plan; SCORP Vol. 2, 1978, p. 149) or those with interstate, state, and multi-county use significance.

   b. Other statewide and multi-county values.

3. Local values for extensive use, such as hunting, fishing, ORV and snowmobile use. Higher priority will be given to acquisition of these values where such extensive use will compliment and enhance these uses on public lands.

4. Acquire access through easement to the above significant values as needed to facilitate public use if surface acquisition is undesirable or not possible.

Wilderness

Acquire in-holdings within the boundaries of Congressionally designated wilderness areas under BLM administration. Priorities are:

1. State in-holdings to be acquired through exchange only

2. Private in-holdings to be acquired by mutual agreement involving exchange, purchase, or gift

In the acquisition of access to designated wilderness areas highest priority will be:

1. Where no access exists.

2. Where it is needed for proper management as identified in wilderness management plans.

Cultural Resources

Any cultural site to be acquired should meet the following evaluation standards of MSO Manual Supplement 8111.24:

1. High Research Value

2. Moderate Scarcity

3. Possess some other unique values such as association with an important historic person or high aesthetic values, or

4. Contribute significantly to interpretive potential of cultural resources already in public ownership.

Strong consideration should be given to manageability. There are only a limited number of potential uses to which a cultural resource can be put (see IM 78-339). The principal use is probably research. Any site acquired for this purpose should be protectable and accessible. The second most important use may be some form of visitor or recreation use. Acquired sites in this case should be in areas also important to the Recreation Program unless they can stand on their own.

The major deciding factor for site acquisition after applying the basic criteria should be the potential for actively managing the site. Sites should not be acquired on scattered or isolated parcels unless they are of overwhelming cultural importance.

Wildlife Habitat Management

In general, areas with important wildlife which are large enough and suitable for public hunting, fishing and trapping and areas suitable for cooperative management under the Sikes Act.

High priority areas for retention and acquisition will be lands with significant wildlife values as defined below. These areas may be of any size.

1. Threatened and Endangered Species (approved recovery plans will also govern actions on these areas)

   a. Black-footed Ferret. Occupied habitat or areas identified through planning for future ferret populations.

   b. Grizzly Bear. Lands containing grizzly population centers (Management Situation 1 and 2 Lands*).

   c. Whooping Crane. Suitable or potential habitat.

   d. Bald Eagle. Historical nest sites with remaining potential, present nest sites, or documented roosting or wintering areas.

   e. Grey Wolf. Occupied habitat.

   f. Peregrine Falcon. Verified nest areas and suitable sites for reestablishment.

2. Fisheries.** Access to or larger areas adjacent to Class 1, 2 or 3 streams** and lake and pond fisheries. Stream areas with restoration potential to become Class 1, 2 or 3 streams. Sites to develop additional fisheries especially near population centers. Sites supporting spawning or nursery areas which may be temporal in nature but important to downstream fisheries. Land that would enable us to acquire needed instream flow reservations.

3. Big Game. Important habitat areas such as crucial winter and associated spring/fall transition areas, kidding/fawning/calving/lambing areas, crucial wallow complexes, mineral licks, and security areas.

4. Upland Game Birds, Migratory Birds and Waterfowl. Crucial breeding, nesting, resting, roosting, feeding and wintering habitat areas or complexes. These will vary in size, for example, a highly productive one acre wetland or 100 acres of nesting cover for pheasants.

5. Raptors. Existing and potential nesting areas for sensitive species or significant nesting complexes for nonsensitive species.

6. Nongame. Crucial habitat complexes.

* From Guidelines for Management Involving Grizzly Bears in Yellowstone Area, USFS, NPS 1979.

** Class of Streams defined by Montana Department of Fish, Wildlife and Parks, 1980. Stream Evaluation Map State of Montana.

B. Retention Criteria

1. Areas of national environmental significance: These include but are not limited to:

   a. Wilderness, Wilderness Study Areas and Former WSAs being Studied for Protective Management

   b. Wild and Scenic Rivers

   c. National Scenic & Historic Trails and Study Trails

   d. Lands containing nationally significant cultural resource sites nominated to or eligible for the National Register of Historic Places

   e. National conservation areas

   f. Wetlands and Riparian Areas under Executive Order 11990

   g. Other Congressionally Designated Areas and Study Areas

   h. Wild Horse Management Areas

   i. Areas of Critical Environmental Concern

2. Areas of national economic significance: these include but are not limited to:

   a. Designated Mineral Resource Areas where disposal of the surface would unnecessarily interfere with the logical development of the mineral estate, e.g., surface minerals, coal, phosphate, known geologic structures, etc.

   b. Public lands containing strategic minerals needed for national defense.

3. Public lands used in support of national defense: these include but are not limited to National Guard maneuver areas.

4. Areas where management is cost-effective or lands containing other important characteristics and public values which can best be managed in public ownership by BLM will be retained. These include but are not limited to:

   a. strategic tracts along rivers, streams, lakes, ponds, springs and trails

   b. community watershed and/or flood plains

   c. wildlife priority areas as defined under acquisition criteria for wildlife habitat areas

   d. important hunting or fishing areas

   e. recreation sites and areas

   f. cultural resource sites etc.

5. Lands with a combination of multiple-use values which dictate they should be retained in public ownership and managed by BLM.

6. Areas where future plans will lead to further consolidation and improvement of lands patterns and management efficiency.

7. Areas which the general public, state and local government consider suitable for permanent public ownership.

8. Public lands withdrawn by the BLM or another Federal agency for which the purpose of the withdrawal remains valid and the resources uses can be managed concurrently by BLM.

9. Public lands that contribute significantly to the stability of the local economy by virtue of Federal ownership.

10. Public lands which provide public access and contain previously mentioned public values which, when considered together, warrant their retention.

C. Disposal Criteria

1. Lands specifically identified through land use plans for exchange, transfer, Recreation and Public Purposes Act applications or sale.

2. Lands of limited public value.

3. Widely scattered parcels which are difficult for BLM to manage with anything beyond minimal custodial administration and have no significant public values.

4. Lands with high public values for proper management by other Federal agencies, or state or local government.

5. Lands which will serve important public objectives (such as community expansion) as provided in FLPMA Sec. 203(a)(3).

6. Lands where disposal would aid in aggregating or repositioning other public lands or public land resource values in retention areas to facilitate national, state and local objectives.

7. Lands acquired for a specific Federal purpose which are no longer required for that or any other Federal purpose.

8. Lands with long term unauthorized use problems, if the lands are not required for public purposes.

9. Lands in which the highest public value will be attained through long term agricultural, commercial or industrial development.

The following criteria are the criteria that were applied and refined from the Supplement to State Director Guidance, June 1984 for each resource area.

A. Acquisition Criteria

1. GREAT FALLS RESOURCE AREA

ACQUISITION: The following criteria will be used to guide the BLMs acquisition of lands, easements and/or minerals through exchange or other means.

1. Facilitate access to retention areas.

2. Lands which will enhance retention areas.

3. Secure for the public significant water related land interests. These interests will include river front, stream, pond, potholes, riparian or spring sites.

WATERSHED:

1. Acquire watershed areas for fish reservoirs and range projects.

GRAZING MANAGEMENT:

1. Acquire non-Federal holdings in key allotments which will enhance manageability and investment opportunity in grazing allotments;

2. and C allotments contiguous to I and M allotments.

WILDLIFE HABITAT MANAGEMENT:

Acquire habitat for:

1. Threatened and endangered plant and animal species including but not limited to:

   bald eagle: historic nesting areas with continuing potential, present sites, documented roosting and wintering areas;

   peregrine falcon: verified nest areas and suitable sites for reestablishment.

2. Fisheries: access to Class 1, 2, and 3 streams, lake and pond fisheries.

3. Important big game habitat.

4. Crucial breeding, nesting areas for upland game birds.

5. Raptors: existing and potential nesting areas for threatened and endangered and sensitive species or significant nesting complexes for non-sensitive species.

RECREATION:

1. Acquire lands with the following significant values:

   Designated rivers and trails;

   Congressionally designated rivers, trails and WSAs.

2. Acquire access for significant use areas, especially to major rivers, streams and the Sweetgrass Hills.

CULTURAL: Acquire important archaeological and historic sites along designated rivers and trails and acquire potential national register sites adjacent to BLM lands.

MINERALS:

1. Acquire surface lands in areas of extensive mineral estate, or known production areas thereby reuniting surface and subsurface estate.

2. Acquire lands to enhance minerals management.

2. HAVRE RESOURCE AREA

ACQUISITION: Lands in this category are the types of tracts the BLM will acquire through the various acquisition programs.

1. Facilitate access to retention areas.

2. Enhance Congressionally designated rivers, trails and study trails.

3. Lands which will enhance retention areas.

4. Secure for the public significant water related land interests. These interests will include river front, stream, potholes, riparian areas, pond or spring sites.

WATERSHED:

1. Acquire watershed areas for fish reservoirs and range projects.

GRAZING MANAGEMENT: Acquire non-Federal holdings in key allotments which will enhance manageability and investment opportunity in grazing allotments.

RECREATION:

1. Acquire lands with the following significant values:

   Designated rivers and trails;

   Congressionally designated study rivers, trails and WSAs.

2. Acquire access for significant use areas, especially to major rivers and streams.

CULTURAL: Acquire important archeological and historic sites along designated rivers and trails and acquire potential national register sites adjacent to BLM lands.

WILDLIFE

Acquire habitat for:

1. Threatened and endangered species;

   bald eagle: historic nesting areas with continuing potential, present sites, documented roosting and wintering areas;

   peregrine falcon: verified nest areas and suitable sites for reestablishment.

2. Fisheries: access to Class 1, 2, and 3 streams, lake and pond fisheries.

3. Important big game habitat.

4. Crucial breeding, nesting areas for grouse and pheasants.

5. Raptors: existing and potential nesting areas for sensitive species or significant nesting complexes for nonsensitive species.

MINERALS:

1. Acquire surface lands in areas of extensive mineral estate, or known production areas thereby reuniting surface and subsurface estate.

2. Acquire lands to enhance minerals management.

B. RETENTION CRITERIA

1. Great Falls Resource Area

Retention Areas: These lands will remain in public ownership and be managed by BLM. Minor adjustments may occur in the future. These adjustments will be primarily limited to surface management agency changes.

1. Areas of national envíronmental significance: These include but are not limited to:

   a. Wild and Scenic Rivers

   b. National Scenic & Historic Trails and Study Trails

   c. National Register of Historic Places

   d. Wetlands and Riparian Areas under EO 11988 and 11990, defined as:

      those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetation or aquatic life that request saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, and flats, and natural ponds. (EO 11990 sec. 5c)

   e. Special Management Areas

   f. Threatened and endangered plan and animal habitat.

2. Areas of national economic significance: include but not limited to:

   lands containing strategic minerals needed for national defense;

   lands containing nominated areas of critical mineral potential.

3. Public lands used in support of national defense.

4. Areas where management is cost-effective or lands containing other important characteristics and public values which can best be managed in public ownership by BLM will be retained.

   Including but not limited to:

   a. strategic tracts along rivers, streams, lakes, ponds, springs and trails;

   b. wildlife priority areas as defined under acquisition criteria particularly sage grouse leks, sharp-tailed grouse leks, crucial antelope range and major concentration areas of sensitive species (raptors in particular);

   c. important fishing areas;

   d. intensive recreation sites and areas.

5. Public lands withdrawn by BLM or another Federal agency for which the purposes remains valid.

6. Retain surface and subsurface estate in areas with known solid or fluid mineral production.

7. Stabilize or enhance local economies or values.

2. Havre Resource Area

RETENTION AREAS: Lands in this area should be retained in long term public ownership. Lands in this category either require retention by law or the tract has more than one important resource value. Disposal through exchange for the latter tracts are allowed only if the exchange significantly increases public values.

1. Areas of national environmental significance: These include but are not limited to:

   a. WSAs;

   b. Wild and Scenic Rivers;

   c. National Scenic & Historic Trails and Study Trails;

   d. National Register Historic Places;

   e. Wetlands and Riparian Areas under EO 11990 and 11988, defined as:

      Those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds (EO 11990 Sec. 5c);

   f. Special Management Areas;

   g. Threatened and Endangered habitat.

2. Areas where management is cost-effective or lands containing other important characteristics and public values which can be best be managed in public ownership by BLM will be retained. Including but not limited to:

   a. strategic tracts along rivers, streams, lakes, ponds, springs, and trails;

   b. wildlife priority areas as defined under acquisition criteria particularly sage grouse leks, sharp-tailed grouse leks and crucial antelope range;

   c. important fishing areas;

   d. recreation sites and areas.

3. Public lands withdrawn by BLM or another Federal agency for which the purpose remains valid.

4. Retain surface and subsurface estate in known solid or fluid mineral production.

C. DISPOSAL CRITERIA (EXCHANGE)

1. Great Falls Resource Area

   1. Lands with low resource values i.e., isolated, no access, custodial allotments, etc. There is no acreage limit in this category.

   2. Lands with long term unauthorized use problems, if the lands are not required for public purposes.

   3. Lands in which the highest public value will be attained through long term agricultural, commercial or industrial development; Class III and better lands for agricultural use.

2. Havre Resource Area

   DISPOSAL:

   Lands with low resource values i.e., isolated, no access, custodial allotments, etc. There is no acreage limit in this category.

   1. Lands with long term unauthorized use problems, if the lands are not required for public purposes.

   2. Lands in which the highest public value will be attained through long term agricultural, commercial or industrial development; Class III and better lands for agriculture.

   FLPMA Section 203(a) sale criteria

   1. such tract because of its location or other characteristics is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another Federal department or agency; or

   2. such tract was acquired for a specific purpose and the tract is no longer required for that or any other Federal purpose; or

   3. disposal of such tract will serve important public objectives, including but not limited to, expansion of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh public other public objectives and values, including but not limited to, recreation and scenic values, which would be served by maintaining such tract in Federal ownership.

APPENDIX 1.2: DISPOSAL LIST

List 1 (Meets Sale Criteria, Emphasis on Exchange)

GREAT FALLS RESOURCE AREA

Tract No.	Location	Total Tract Acres
	Glacier County	
	T. 32 N., R. 5 W., PMM	
	Section 3: NW¼SW¼	40.00
	4: E½SW¼, SW¼SW¼, NE¼SE¼	160.00
	8: SE¼NE¼	40.00
	17: W½NE¼, NE¼NW¼	120.00
	Toole County	
	T. 30 N., R. 1 W., PMM	
	Section 6: Lot 1	37.41
	T. 31 N., R. 1 W., PMM	
*	Section 19: NE¼NE¼	40.00
*	27: SW¼SW¼	40.00
*	29: SW¼SE¼	40.00
	30: Lot 1, NW¼NE¼, NE¼NW¼	118.57
	31: NE¼NE¼, S½SE¼	120.00
	T. 31 N., R. 2 W., PMM	
	Section 1: SW¼NE¼, E½SE¼	120.00
	2: Lot 1, 2, SE¼NE¼, SE¼SW¼, SW¼SE¼	199.58
	11: NW¼NE¼, NE¼NW¼, SE¼SW¼, NE¼SE¼	160.00
	12: NW¼	160.00
	13: SW¼NE¼, W½, N½SE¼	440.00
	14: S½SW¼, NE¼SW¼	120.00
	18: Lot 4	35.96
	22: NE¼SW¼	40.00
	23: E½SW¼	80.00
	24: E½, E½W½, NW¼NW¼	520.00
	26: NE¼NW¼	40.00
	T. 31 N., R. 3 W., PMM	
*	Section 5: Lots 1, 2	80.32
	6: Lot 2, SW¼NE¼, SE¼SW¼, W½SE¼	200.03
	7: Lot 1, E½NE¼, NW¼NE¼, NE¼NW¼	193.05
	13: SE¼SE¼	40.00
	T. 31 N., R. 4 W., PMM	
	Section 12: E½NE¼, SW¼NE¼, E½SW¼, NW¼SE¼	240.00
	T. 32 N., R. 2 W., PMM	
	Section 6: Lot 1	37.36
	7: S½NE¼, E½SE¼	160.00
	17: NE¼NE¼	40.00
	17: W½NW¼	80.00
	T. 32 N., R. 3 W., PMM	
	Section 12: S½S½	160.00
	13: N½NE¼	80.00
	22: SE¼NE¼	40.00
	T. 33 N., R. 3 W., PMM	
	Section 13: W½SW¼	80.00
	14: E½SE¼	80.00
	21: SW¼NE¼	40.00
	22: N½SW¼, SW¼SW¼, NW¼SE¼	160.00
	23: NE¼, NE¼NW¼, E½SE¼, NW¼SE¼	320.00
	24: W½NW¼, SE¼SE¼	120.00
	25: SE¼SW¼	40.00
	26: NE¼NE¼	40.00
	27: NE¼NE¼	40.00
	T. 34 N., R. 1 E., PMM	
*	Section 18: NE¼NE¼	40.00
	T. 34 N., R. 2 W., PMM	
*	Section 10: NW¼NE¼	40.00
	T. 34 N., R. 3 W., PMM	
	Section 3: SW¼SE¼	40.00
	10: N½SW¼	80.00
	28: W½SW¼, SE¼SW¼	120.00
	33: NW¼NE¼, N½NW¼	120.00

Tract No.	Location	Total Tract Acres
	Toole County (cont.)	
	T. 35 N., R. 1 W., PMM	
	Section 19: NE¼NW¼	40.00
	30: NE¼NW¼	40.00
	31: SE¼NW¼	40.00
	T. 35 N., R. 2 W., PMM	
	Section 2: SE¼	160.00
	6: Lot 2	39.80
	12: N½, N½SW¼, SE¼SW¼	440.00
	13: E½NW¼	80.00
	25: S½SW¼	80.00
	T. 35 N., R. 3 W., PMM	
	Section 27: E½SW¼	80.00
	32: E½SW¼	80.00
	33: NE¼NE¼, W½SE¼	120.00
	34: NE¼NE¼, NW¼NW¼, SE¼SW¼, SW¼SE¼	160.00
	T. 36 N., R. 2 E., PMM	
*	Section 15: NW¼NE¼, SE¼SE¼, SW¼SE¼	120.00
	T. 36 N., R. 3 E., PMM	
*	Section 9: NE¼SW¼	40.00
	18: Lots 5, 6, 11, 12, NW¼SE¼	96.58
	T. 36 N., R. 2 W., PMM	
*	Section 17: S½NE¼, SE¼NW¼, E½SW¼, SE¼	360.00
	TOTAL	15,689.00

*Lands identified for disposal in State Director Guidance.

APPENDIX 1.2: DISPOSAL LIST

List 1, Contd.

HAVRE RESOURCE AREA

Tract No.	Location		Total Tract Acres
	Blaine County		
	T. 36 N., R. 22 E., Sec. 14:	SE¼NE¼	40.00
	T. 36 N., R. 22 E., Sec. 31:	SE¼NW¼	40.00
	T. 33 N., R. 20 E., Sec. 25:	NE¼NE¼	40.00
	T. 32 N., R. 19 E., Sec. 3:	Lot 3	39.10
	T. 32 N., R. 22 E., Sec. 6:	Lot 4	34.58
	T. 32 N., R. 18 E., Sec. 1:	SW¼SW¼	40.00
	T. 32 N., R. 23 E., Sec. 8:	SE¼NE¼, NW¼SE¼	120.00
	T. 32 N., R. 23 E., Sec. 9:	NW¼SW¼	
	T. 32 N., R. 20 E., Sec. 15:	SW¼NW¼	40.00
	T. 32 N., R. 21 E., Sec. 13:	NE¼SW¼, NW¼SE¼	80.00
	T. 32 N., R. 20 E., Sec. 14:	S½SE¼	80.00
	T. 32 N., R. 19 E., Sec. 22:	SE¼NE¼, NE¼SE¼	80.00
	T. 32 N., R. 20 E., Sec. 19:	W½NE¼, NW¼SE¼	120.00
	T. 32 N., R. 19 E., Sec. 26:	W½SW¼	80.00
	T. 32 N., R. 19 E., Sec. 33:	SE¼	160.00
	T. 31 N., R. 17 E., Sec. 12:	E½E½, SW¼SE¼	342.64
	T. 31 N., R. 18 E., Sec. 7:	Lots 1, 2, 3, 4	
	T. 31 N., R. 21 E., Sec. 20:	NW¼NE¼	40.00
	T. 31 N., R. 22 E., Sec. 19:	SE¼SE¼	40.00
	T. 30 N., R. 17 E., Sec. 2:	SE¼NW¼	40.00
	T. 29 N., R. 17 E., Sec. 8:	NW¼NE¼	40.00
	T. 35 N., R. 25 E., Sec. 14:	S½SE¼	80.00
	T. 28 N., R. 22 E., Sec. 29:	NE¼SW¼	40.00
	T. 29 N., R. 20 E., Sec. 1:	NW¼SE¼	40.00
	T. 29 N., R. 20 E., Sec. 25:	S½SE¼	597.79
	T. 29 N., R. 21 E., Sec. 30:	Lots 3, 4, SE¼NE¼, E½SE¼, SE¼	
	T. 29 N., R. 21 E., Sec. 31:	Lot 1, N½NE¼, NE¼NW¼	
	T. 29 N., R. 21 E., Sec. 6:	SE¼SW¼	40.00
	T. 29 N., R. 21 E., Sec. 8:	S½NE¼	80.00
	T. 29 N., R. 21 E., Sec. 18:	Lots 3, 4, E½SW¼, W½SE¼	320.86
	T. 29 N., R. 21 E., Sec. 19:	Lots 1, 2	
	T. 29 N., R. 21 E., Sec. 19:	S½NE¼	80.00
	T. 29 N., R. 21 E., Sec. 20:	SE¼SW¼	40.00
	T. 29 N., R. 21 E., Sec. 24:	SE¼SW¼	40.00
	T. 29 N., R. 21 E., Sec. 24:	SE¼SE¼	40.00
	T. 29 N., R. 21 E., Sec. 34:	SW¼NW¼	40.00
	T. 28 N., R. 19 E., Sec. 13:	S½NE¼, NW¼SE¼	120.00
	T. 28 N., R. 20 E., Sec. 30:	SE¼SW¼	188.30
	T. 28 N., R. 20 E., Sec. 31:	Lots, 1, 2, E½NW¼	
	T. 28 N., R. 21 E., Sec. 6:	Lots 4, 5	73.68
	T. 28 N., R. 21 E., Sec. 7:	Lot 1, NE¼NW¼	77.06
	T. 28 N., R. 21 E., Sec. 6:	SE¼SE¼	40.00
	T. 28 N., R. 21 E., Sec. 17:	NW¼SW¼	80.00
	T. 28 N., R. 21 E., Sec. 18:	NE¼SE¼	
	T. 28 N., R. 21 E., Sec. 17:	S½SE¼	80.00
	T. 28 N., R. 21 E., Sec. 19:	NW¼NE¼	40.00
	T. 27 N., R. 17 E., Sec. 26:	SW¼NW¼	40.00
	T. 27 N., R. 17 E., Sec. 26:	NE¼SW¼	40.00
	T. 27 N., R. 17 E., Sec. 34:	SE¼SE¼	40.00
	T. 27 N., R. 18 E., Sec. 27:	SE¼NE¼	40.00
	T. 27 N., R. 18 E., Sec. 32:	SE¼NW¼	40.00
	T. 27 N., R. 18 E., Sec. 35:	NW¼NE¼	40.00
	T. 27 N., R. 18 E., Sec. 31:	SE¼SW¼, SW¼SE¼	80.00
	T. 27 N., R. 18 E., Sec. 34:	SW¼SW¼	82.37
	T. 26 N., R. 18 E., Sec. 3:	Lot 4	
	T. 28 N., R. 19 E., Sec. 30:	SW¼NE¼	40.00
	T. 27 N., R. 21 E., Sec. 27:	NW¼	160.00
	T. 27 N., R. 22 E., Sec. 33:	Lot 8	52.36
	T. 26 N., R. 17 E., Sec. 12:	NW¼NW¼	40.00
	T. 26 N., R. 17 E., Sec. 14:	SE¼NW¼	40.00
	T. 26 N., R. 17 E., Sec. 13:	SE¼SW¼	40.00
	T. 26 N., R. 18 E., Sec. 9:	NE¼SW¼	40.00
	T. 26 N., R. 18 E., Sec. 18:	SE¼SW¼	40.00
	T. 26 N., R. 18 E., Sec. 22:	NW¼NE¼	40.00
	T. 26 N., R. 18 E., Sec. 20:	NW¼NW¼	40.00
	T. 26 N., R. 18 E., Sec. 19:	SE¼NE¼	40.00
	T. 27 N., R. 19 E., Sec. 1:	Lot 1	23.92
	T. 27 N., R. 21 E., Sec. 2:	Lots 1, 2, 3, 4	186.12
	T. 27 N., R. 21 E., Sec. 3:	Lots 1, 2, 8	
	T. 27 N., R. 21 E., Sec. 3:	S½NW¼	80.00
	T. 27 N., R. 21 E., Sec. 1:	Lots 1, 2	48.71
	T. 27 N., R. 22 E., Sec. 4:	Lots 1, 2	53.44
	T. 27 N., R. 22 E., Sec. 4:	E½NW¼	80.00
	T. 27 N., R. 21 E., Sec. 11:	SW¼NW¼, NW¼SW¼	80.00

Tract No.	Location		Total Tract Acres
	Blaine County (cont.)		
	T. 27 N., R. 21 E., Sec. 1:	SW¼SW¼	240.00
	T. 27 N., R. 21 E., Sec. 12:	W½NW¼, SE¼NW¼, E½SW¼	
	T. 27 N., R. 22 E., Sec. 7:	W½NW¼, NW¼SW¼	120.00
	T. 27 N., R. 22 E., Sec. 7:	NE¼NE¼	40.00
	T. 27 N., R. 22 E., Sec. 8:	E½NW¼, NE¼SW¼	120.00
	T. 27 N., R. 22 E., Sec. 9:	SW¼NW¼	40.00
	T. 27 N., R. 22 E., Sec. 17:	NE¼SW¼	40.00
	T. 27 N., R. 22 E., Sec. 20:	SE¼NW¼	40.00
	T. 27 N., R. 22 E., Sec. 19:	NW¼NW¼	320.00
	T. 27 N., R. 21 E., Sec. 24:	NE¼, E½NW¼, NE¼SE¼	
	T. 27 N., R. 21 E., Sec. 23:	SE¼NE¼	40.00
	T. 27 N., R. 21 E., Sec. 24:	SW¼SW¼	40.00
	T. 27 N., R. 21 E., Sec. 25:	S½NE¼, SE¼NW¼	120.00
	T. 27 N., R. 21 E., Sec. 26:	NE¼SE¼	40.00
	Hill County		
	T. 37 N., R. 11 E., Sec. 2:	Lots 5, 6, 7, 8, SW¼NE¼	114.04
	T. 37 N., R. 11 E., Sec. 19:	Lot 1 (Sold)	80.31
	T. 37 N., R. 10 E., Sec. 24:	NE¼NE¼	
	T. 37 N., R. 15 E., Sec. 6:	Lots 9, 10	53.73
	T. 37 N., R. 15 E., Sec. 29:	SE¼NE¼, NW¼SE¼	80.00
	T. 37 N., R. 17 E., Sec. 7:	SE¼SE¼	40.00
	T. 35 N., R. 12 E., Sec. 18:	SW¼NE¼	40.00
	T. 34 N., R. 13 E., Sec. 31:	NW¼NE¼	40.00
	T. 32 N., R. 11 E., Sec. 5:	Lot 1	31.64
	T. 32 N., R. 14 E., Sec. 26:	N½SW¼	80.00
	T. 31 N., R. 12 E., Sec. 9:	W½SE¼	80.00
	T. 30 N., R. 11 E., Sec. 1:	NE¼SE¼	40.00
	T. 31 N., R. 16 E., Sec. 24:	NW¼SE¼	40.00
	T. 30 N., R. 17 E., Sec. 8:	NE¼SE¼	40.00
	T. 30 N., R. 17 E., Sec. 4:	NW¼SE¼	40.00
	T. 30 N., R. 16 E., Sec. 35:	Lot 3	17.62
	T. 30 N., R. 17 E., Sec. 29:	Lot 7	8.42
	T. 30 N., R. 10 E., Sec. 1:	Lot 11	17.07
	Chouteau County		
	T. 28 N., R. 13 E., Sec. 34:	SE¼SW¼	40.00
	T. 24 N., R. 7 E., Sec. 4:	SW¼NE¼, SE¼NW¼	80.00
	T. 27 N., R. 12 E., Sec. 10:	NE¼SE¼	40.00
	T. 24 N., R. 7 E., Sec. 14:	S½NW¼	80.00
	T. 25 N., R. 7 E., Sec. 34:	NE¼NW¼	40.00
	T. 24 N., R. 7 E., Sec. 4:	SE¼SE¼	40.00
	T. 24 N., R. 7 E., Sec. 3:	SE¼NW¼, N½SW¼	120.00
	T. 24 N., R. 7 E., Sec. 3:	SW¼SE¼	40.00
	T. 24 N., R. 7 E., Sec. 2:	SE¼SW¼	40.00
	T. 24 N., R. 7 E., Sec. 11:	NW¼SW¼	40.00
	T. 24 N., R. 7 E., Sec. 11:	SE¼NE¼, NE¼SE¼	553.02
	T. 24 N., R. 7 E., Sec. 12:	S½N½, N½SW¼, SW¼SW¼, NW¼SE¼	
	T. 24 N., R. 8 E., Sec. 7:	Lots 1, 2, NE¼NW¼, SE¼NW¼	

List 2 (Exchange List - Doesn't Meet Criteria-Sale)

act o.	Location		Total Tract Acres
	Hill County		
	T. 37 N., R. 15 E., Sec. 7:	SE¼SE¼	40.00
	T. 28 N., R. 16 E., Sec. 1:	Lots 8, 13, 14	103.84
	T. 28 N., R. 16 E., Sec. 24:	Lot 4	24.71
	T. 28 N., R. 16 E., Sec. 32:	NW¼, N½SW¼	240.00
	T. 28 N., R. 16 E., Sec. 33:	N½NE¼	200.00 *
	T. 28 N., R. 16 E., Sec. 34:	NW¼NE¼, N½NW¼	
	T. 28 N., R. 17 E., Sec. 5:	N½SW¼	80.00
	T. 28 N., R. 17 E., Sec. 18:	SW¼SE¼	80.00
	T. 28 N., R. 17 E., Sec. 19:	NW¼NE¼	
	Chouteau County		
	T. 27 N., R. 16 E., Sec. 11:	NW¼SE¼	40.00
	T. 26 N., R. 16 E., Sec. 2:	SE¼SW¼	40.00
	T. 26 N., R. 16 E., Sec. 3:	Lot 1	39.96
	T. 26 N., R. 16 E., Sec. 3:	NE¼SE¼	40.00
	T. 26 N., R. 16 E., Sec. 9:	E½E½	760.00
	T. 26 N., R. 16 E., Sec. 10:	N½, SW¼, NW¼SE¼	
	T. 26 N., R. 16 E., Sec. 15:	NW¼, N½SW¼	
	T. 26 N., R. 16 E., Sec. 11:	NW¼SW¼	40.00
	T. 26 N., R. 16 E., Sec. 17:	E½NE¼	80.00
	T. 26 N., R. 16 E., Sec. 18:	Lot 1	34.47
	T. 26 N., R. 16 E., Sec. 30:	NE¼SE¼	40.00
	T. 26 N., R. 16 E., Sec. 32:	W½NE¼, NW¼	240.00
	T. 26 N., R. 16 E., Sec. 33:	SE¼SW¼	40.00
	T. 26 N., R. 16 E., Sec. 34:	SE¼NE¼	40.00
	T. 26 N., R. 17 E., Sec. 4:	SE¼SW¼	40.00
	T. 26 N., R. 17 E., Sec. 32:	SW¼NE¼	40.00
	T. 26 N., R. 17 E., Sec. 32:	S½SE¼	80.00
	T. 24 N., R. 16 E., Sec. 13:	SW¼NW¼	40.00
	T. 24 N., R. 16 E., Sec. 13:	NE¼SW¼	40.00
	T. 24 N., R. 16 E., Sec. 15:	NW¼SW¼	40.00
	T. 24 N., R. 16 E., Sec. 17:	NE¼NW¼	40.00
	T. 24 N., R. 16 E., Sec. 18:	Lot 2	28.84
	T. 24 N., R. 16 E., Sec. 20:	NE¼SE¼	40.00
	T. 24 N., R. 16 E., Sec. 21:	SW¼SW¼	40.00
	T. 24 N., R. 16 E., Sec. 21:	W½NE¼	80.00
	T. 24 N., R. 16 E., Sec. 33:	SE¼NW¼	40.00
	T. 23 N., R. 16 E., Sec. 4:	Lot 2	39.83
	T. 23 N., R. 16 E., Sec. 5:	Lot 2, S½N½, NE¼SW¼, NW¼SE¼	279.96
	T. 23 N., R. 15 E., Sec. 12:	SE¼NW¼, NE¼SW¼, W½SE¼	651.45
	T. 23 N., R. 15 E., Sec. 13:	NE¼	
	T. 23 N., R. 16 E., Sec. 17:	NW¼	
	T. 23 N., R. 16 E., Sec. 18:	Lots 1, 2, 3, E½NE¼	
	T. 23 N., R. 15 E., Sec. 13:	NW¼SW¼	40.00
	T. 23 N., R. 15 E., Sec. 14:	NE¼	160.00
	T. 26 N., R. 13 E., Sec. 5:	SW¼SE¼	40.00
	T. 26 N., R. 13 E., Sec. 8:	NE¼SW¼	40.00
	T. 26 N., R. 13 E., Sec. 17:	NE¼NW¼	40.00
	T. 26 N., R. 13 E., Sec. 17:	N½SW¼	80.00
	T. 26 N., R. 13 E., Sec. 17:	NE¼SE¼	40.00
	T. 26 N., R. 13 E., Sec. 18:	W½SE¼	80.00
	T. 25 N., R. 13 E., Sec. 1:	SE¼NW¼	40.00
	T. 27 N., R. 12 E., Sec. 31:	Lot 3	38.04
	T. 26 N., R. 11 E., Sec. 8:	SW¼NE¼, S½NW¼	120.00
	T. 26 N., R. 11 E., Sec. 17:	NE¼SE¼	40.00
	T. 26 N., R. 11 E., Sec. 18:	Lot 1	37.67
	T. 25 N., R. 10 E., Sec. 5:	SW¼NW¼	40.00
	T. 25 N., R. 10 E., Sec. 19:	SE¼SW¼	80.00
	T. 25 N., R. 10 E., Sec. 30:	NE¼NW¼	
	T. 25 N., R. 9 E., Sec. 23:	N½NE¼	120.00
	T. 25 N., R. 9 E., Sec. 24:	NW¼NW¼	120.00
	T. 25 N., R. 9 E., Sec. 23:	SE¼NW¼	40.00
	T. 25 N., R. 9 E., Sec. 24:	NE¼SW¼	40.00
	T. 26 N., R. 9 E., Sec. 35:	NE¼NE¼	40.00
	T. 24 N., R. 8 E., Sec. 4:	Lots 1, 2, NW¼NE¼	125.78
	T. 24 N., R. 8 E., Sec. 32:	SW¼SW¼	40.00
	T. 24 N., R. 8 E., Sec. 32:	Lot 2	26.34
	T. 26 N., R. 8 E., Sec. 28:	N½NW¼	80.00
	T. 26 N., R. 7 E., Sec. 11:	NE¼NE¼	40.00

Tract No.	Location		Total Tract Acres
	Chouteau County (cont.)		
	T. 27 N., R. 8 E., Sec. 6:	Lots 1, 2, 3, 4, 5, 6, 7, E½W½, E½	1,890.81
	T. 27 N., R. 8 E., Sec. 7:	N½NE¼, NE¼NW¼	
	T. 27 N., R. 8 E., Sec. 8:	W½	
	T. 28 N., R. 8 E., Sec. 29:	SE¼SE¼	
	T. 28 N., R. 8 E., Sec. 31:	Lot 4, E½SW¼, SE¼	
	T. 28 N., R. 8 E., Sec. 32:	NE¼, S½NW¼, SW¼	
	Blaine County		
	T. 37 N., R. 17 E., Sec. 2:	SE¼	1,080.00
	T. 37 N., R. 17 E., Sec. 10:	E½, E½NW¼	
	T. 37 N., R. 17 E., Sec. 11:	N½, SW¼	
	T. 37 N., R. 17 E., Sec. 12:	SW¼SW¼	40.00
	T. 37 N., R. 17 E., Sec. 26:	S½SW¼	640.00
	T. 37 N., R. 17 E., Sec. 34:	E½E½, NW¼NE¼, N½NW¼, SW¼NW¼	
	T. 37 N., R. 17 E., Sec. 35:	NW¼, N½SW¼	
	T. 36 N., R. 17 E., Sec. 10:	W½SW¼	160.00
	T. 36 N., R. 17 E., Sec. 15:	N½NW¼	
	T. 36 N., R. 17 E., Sec. 11:	S½NW¼	80.00

* - Lands are withdrawn for Power Site

	T. 35 N., R. 17 E., Sec. 1:	Lots 1, 2, 3, 4, S½N½	320.48
	T. 35 N., R. 17 E., Sec. 26:	All	1,280.00
	T. 35 N., R. 17 E., Sec. 27:	S½	
	T. 35 N., R. 17 E., Sec. 35:	N½	
	T. 37 N., R. 18 E., Sec. 2:	Lots 4, 9, 10, 11, 12, S½N½, S½	891.28
	T. 37 N., R. 18 E., Sec. 3:	Lots 1, 2, 3, 4, S½N½	
	T. 37 N., R. 18 E., Sec. 10:	S½ SE¼	320.00
	T. 36 N., R. 18 E., Sec. 31:	Lots 1, 2, E½NW¼, NE¼	
	T. 36 N., R. 18 E., Sec. 30:	Lots 3, 4, E½SW¼,	646.44
	T. 35 N., R. 18 E., Sec. 22:	NE¼	160.00
	T. 35 N., R. 18 E., Sec. 26:	NE¼	160.00
	T. 35 N., R. 18 E., Sec. 35:	N½N½, S½NE¼, N½SE¼	320.00
	T. 34 N., R. 18 E., Sec. 4:	SW¼NE¼	40.00
	T. 36 N., R. 19 E., Sec. 25:	W½	320.00
	T. 35 N., R. 19 E., Sec. 27:	NE¼SE¼	40.00
	T. 35 N., R. 19 E., Sec. 34:	S½SE¼	720.00
	T. 35 N., R. 19 E., Sec. 35:	All	
	T. 34 N., R. 19 E., Sec. 2:	Lots 1, 2, 3, 4 S½N½	
	T. 34 N., R. 19 E., Sec. 17:	NE¼NW¼	40.00
	T. 36 N., R. 20 E., Sec. 18:	NE¼	160.00
	T. 36 N., R. 20 E., Sec. 1:	Lots 1, 2, S½NE¼, SE¼	1,280.82
	T. 36 N., R. 20 E., Sec. 12:	All	
	T. 36 N., R. 20 E., Sec. 13:	W½	
	T. 36 N., R. 21 E., Sec. 6:	Lot 5	45.84
	T. 35 N., R. 20 E., Sec. 34:	S½	1,603.28
	T. 34 N., R. 20 E., Sec. 3:	Lots 1, 2, 3, 4, S½N½, S½	
	T. 34 N., R. 20 E., Sec. 2:	S½	
	T. 34 N., R. 20 E., Sec. 11:	E½	
	T. 34 N., R. 20 E., Sec. 22:	N½	320.00
	T. 33 N., R. 20 E., Sec. 9:	SE¼	160.00
	T. 33 N., R. 20 E., Sec. 20:	E½SE¼	80.00
	T. 37 N., R. 21 E., Sec. 10:	SE¼	240.00
	T. 37 N., R. 21 E., Sec. 15:	N½NE¼	
	T. 35 N., R. 21 E., Sec. 5:	S½NE¼, E½SW¼, SE¼	640.00
	T. 35 N., R. 21 E., Sec. 8:	N½	
	T. 35 N., R. 21 E., Sec. 21:	W½	640.00
	T. 35 N., R. 21 E., Sec. 28:	W½	
	T. 35 N., R. 21 E., Sec. 27:	W½W½, E½SW¼	320.00
	T. 35 N., R. 21 E., Sec. 34:	W½NW¼	
	T. 35 N., R. 21 E., Sec. 26:	SE¼SE¼	160.00
	T. 35 N., R. 21 E., Sec. 35:	E½NE¼, NE¼SE¼	
	T. 33 N., R. 21 E., Sec. 9:	W½	320.00

Tract No.	Location		Total Tract Acres
	Blaine County (cont.)		
	T. 33 N., R. 21 E., Sec. 29:	N½NE¼, NE¼NW¼	160.00
	T. 33 N., R. 21 E., Sec. 28:	NW¼NW¼	
	T. 33 N., R. 21 E., Sec. 27:	NW¼	320.00
	T. 33 N., R. 21 E., Sec. 28:	NW¼	
	T. 35 N., R. 22 E., Sec. 30:	Lots 3, 4, SW¼NE¼, E½SW¼, W½SE¼, SE¼SE¼	783.95
	T. 35 N., R. 22 E., Sec. 31:	Lots 1, 2, E½NW¼, NE¼	
	T. 35 N., R. 22 E., Sec. 32:	W½W½	
	T. 35 N., R. 22 E., Sec. 33:	E½E½	480.00
	T. 35 N., R. 22 E., Sec. 34:	W½	
	T. 35 N., R. 22 E., Sec. 35:	SW¼SW¼	40.00
	T. 35 N., R. 22 E., Sec. 35:	SW¼SE¼	40.00
	T. 34 N., R. 22 E., Sec. 13:	W½W½	160.00
	T. 34 N., R. 22 E., Sec. 23:	N½	320.00
	T. 34 N., R. 22 E., Sec. 24:	E½	669.52
	T. 34 N., R. 23 E., Sec. 18:	Lots 3, 4, SE¼NW¼, E½SW¼	
	T. 34 N., R. 23 E., Sec. 19:	Lots 1, 2, 3, NE¼NW¼	
	T. 34 N., R. 22 E., Sec. 26:	NW¼, N½SW¼	240.00
	T. 33 N., R. 23 E., Sec. 6:	Lots 3, 4, W½SW¼, SE¼	322.11
	T. 36 N., R. 24 E., Sec. 14:	N½NW¼, SW¼NW¼	120.00
	T. 35 N., R. 25 E., Sec. 21:	E½	400.00
	T. 35 N., R. 25 E., Sec. 22:	W½NW¼	
	T. 33 N., R. 26 E., Sec. 6:	Lots 1, 2, S½NE¼, SE¼	320.96
	T. 33 N., R. 24 E., Sec. 29:	S½	320.00
	T. 32 N., R. 23 E., Sec. 4:	SE¼NE¼	40.00
	T. 32 N., R. 25 E., Sec. 34:	E½	640.00
	T. 32 N., R. 25 E., Sec. 35:	S½	
	T. 32 N., R. 25 E., Sec. 32:	SW¼NW¼, NW¼SW¼	80.00
	T. 31 N., R. 25 E., Sec. 5:	N½SW¼	80.00
	T. 31 N., R. 25 E., Sec. 6:	SW¼SE¼	40.00
	T. 31 N., R. 25 E., Sec. 8:	NW¼NW¼	40.00
	T. 31 N., R. 25 E., Sec. 9:	E½NE¼	160.00
	T. 31 N., R. 25 E., Sec. 10:	W½NW¼	
	T. 31 N., R. 25 E., Sec. 10:	NE¼, NW¼SE¼	200.00
	T. 31 N., R. 25 E., Sec. 11:	SE¼SW¼	40.00
	T. 30 N., R. 21 E., Sec. 1:	Lots 1, 2, 3, 4, S½NE¼, SE¼NW¼, SE¼	2,233.27
	T. 30 N., R. 21 E., Sec. 2:	Lot 1	
	T. 30 N., R. 21 E., Sec. 12:	N½NE¼, SW¼NE¼, NW¼SE¼	
	T. 30 N., R. 22 E., Sec. 4:	Lots 12, 13, 14, 15	
	T. 30 N., R. 22 E., Sec. 5:	S½SW¼, SE¼	
	T. 30 N., R. 22 E., Sec. 6:	SE¼SW¼, SE¼	
	T. 30 N., R. 22 E., Sec. 7:	N½, N½SE¼	
	T. 30 N., R. 22 E., Sec. 8:	All	
	T. 30 N., R. 22 E., Sec. 9:	Lots 9, 10, 11, 12	
	T. 27 N., R. 22 E., Sec. 31:	W½SE¼	80.00
**	T. 27 N., R. 21 E., Sec. 33:	SE¼NE¼, N½SE¼	560.00
	T. 27 N., R. 21 E., Sec. 34:	NE¼, S½NW¼, N½NE¼, N½SE¼, SE¼SE¼	
	T. 28 N., R. 19 E., Sec. 26:	SW¼SW¼	240.00
	T. 28 N., R. 19 E., Sec. 27:	SE¼SE¼	
	T. 28 N., R. 19 E., Sec. 35:	W½W½	
	T. 27 N., R. 19 E., Sec. 1:	Lot 5, SW¼NW¼	272.22
	T. 27 N., R. 19 E., Sec. 2:	Lots 1, 2, 3, 7, 8, SE¼NE¼	
	T. 27 N., R. 19 E., Sec. 17:	SW¼NE¼, SE¼NW¼	80.00
	T. 27 N., R. 18 E., Sec. 25:	SE¼SE¼	40.00
	T. 27 N., R. 20 E., Sec. 20:	S½NE¼	80.00
	T. 26 N., R. 19 E., Sec. 7:	NE¼SE¼	40.00
	T. 26 N., R. 18 E., Sec. 19:	SE¼SW¼	40.00
	T. 26 N., R. 18 E., Sec. 30:	Lots 1, 2	78.70
	T. 26 N., R. 17 E., Sec. 22:	NW¼	160.00
	T. 26 N., R. 17 E., Sec. 25:	NE¼NW¼	40.00
	T. 26 N., R. 17 E., Sec. 23:	SW¼SE¼	680.00
	T. 26 N., R. 17 E., Sec. 26:	W½E½, SE¼NE¼, NW¼, N½SW¼, SW¼SW¼	
	T. 26 N., R. 17 E., Sec. 27:	SE¼NE¼, N½SE¼, SE¼SE¼	
	T. 26 N., R. 17 E., Sec. 35:	NW¼NE¼	
	T. 26 N., R. 17 E., Sec. 35:	S½NW¼	80.00
	T. 25 N., R. 17 E., Sec. 1:	SW¼NE¼	40.00
	T. 25 N., R. 18 E., Sec. 6:	Lots 1, 2, S½NE¼	164.36
	T. 25 N., R. 18 E., Sec. 3:	SW¼SW¼	120.00
	T. 25 N., R. 18 E., Sec. 4:	E½SE¼	
	T. 25 N., R. 18 E., Sec. 15:	E½	320.00
	T. 25 N., R. 18 E., Sec. 20:	SE¼NE¼, NE¼SE¼	80.00
	T. 25 N., R. 18 E., Sec. 27:	SW¼NW¼, W½SW¼	760.00
	T. 25 N., R. 18 E., Sec. 28:	NW¼NE¼, S½NE¼, NE¼SW¼, S½SW¼, SE¼	
	T. 25 N., R. 18 E., Sec. 33:	N½NE¼, NE¼NW¼	
	T. 25 N., R. 18 E., Sec. 34:	NW¼NW¼	
	T. 25 N., R. 18 E., Sec. 32:	E½NE¼	80.00
	T. 24 N., R. 18 E., Sec. 25:	SE¼NE¼	40.00
	T. 36 N., R. 22 E., Sec. 19:	Lot 3	33.23
	T. 36 N., R. 22 E., Sec. 20:	NW¼NW¼	40.00
	T. 36 N., R. 20 E., Sec. 10:	NE¼NW¼	40.00
	T. 36 N., R. 20 E., Sec. 11:	W½	320.00
	T. 36 N., R. 26 E., Sec. 19:	W½NW¼, SW¼NW¼	120.00
	T. 34 N., R. 22 E., Sec. 32:	NW¼ N½SE¼	320.00
	T. 34 N., R. 22 E., Sec. 33:	W½SW¼	
		TOTAL	34,428.16

** - Lands are withdrawn for Coal

Appendix 1.3

Reasonably Foreseeable Development of Oil & Gas Resources

This appendix presents an in-depth description of the oil and gas leasing and development program in the West HiLine planning area. In particular, it addresses reasonably foreseeable oil and gas development, under the direction provided in the Management Common to All Alternatives section, during the life of the plan and the cumulative impacts of leasing and development. This information supplements the management guidance and information presented in Chapters 2, 3 and 4. This appendix has been analyzed in conjunction with the information presented in the body of the RMP in determining the BLM's proposed alternative.

The RMP will determine which lands will be leased for oil and gas under what conditions; and those areas where leasing for oil and gas will be restricted or not undertaken. Issued oil and gas leases may be explored and developed, subject to lease stipulations, after additional site specific analysis for conformance with this plan and additional NEPA analysis, as needed.

The BLM will consider this information again prior to issuing a Record of Decision.

A. OIL AND GAS LEASING

The Mineral Leasing Act of 1920 (as amended), provides that all public lands be open to oil and gas leasing unless a specific land order has been issued to close the area. Through the Bureau's land use planning system, the availability of public land for leasing is analyzed and constraints on leasing and oil and gas operations are identified. Oil and gas leases are then issued from the Montana State Office in Billings.

The issuance of a lease authorizes the lessee to actively explore and/or develop the lease, guided by any attached stipulations. Stipulations serve to point out areas of special concern. Time, distance, and surface occupancy stipulations are common lease restrictions used to protect surface resources.

Occasionally, stipulations protecting the mineral resource from drainage or requiring the new lessee to assume responsibility for any unplugged wells on a lease are added to protect mineral resources.

Standard stipulations (form MT 3109-1 July, 1984, in Appendix 2.2) are attached to all leases prior to issuance to provide minimum guidelines. In addition, certain areas may be designated for special stipulations. These special stipulations would be attached, for those designated lands, prior to lease offering. Additional site specific stipulations could be developed, consistent with this RMP, during the

field office evaluation of the Application for Permit to Drill (APD). Additional National Environmental Policy Act (NEPA) analysis and documentation would occur on these APDs as necessary.

The East, Middle and West Buttes of the Sweet Grass Hills, Kevin Rim, and Cow Creek ACECs and other important wildlife habitat areas may require application of restrictive (seasonal or timing) stipulations (see Appendix 2.2 and the minerals overlay to Map 1) to protect important habitats. The Upper Missouri National Wild and Scenic River Corridor is discretionarily closed to leasing in the scenic and recreational segments; and nondiscretionarily closed to leasing in the wild segments. If in the future, the Secretary of the Interior develops regulations for leasing in the Upper Missouri River Corridor analyses would be conducted to determine the level of protection and to develop stipulations necessary to minimize surface and visual impacts.

Drilling and exploration activities on federal lands open to oil and gas leasing in the RMP planning area, are administered by the Havre and Great Falls Resource Area Offices, both under the guidance of the Lewistown District Office.

A federal lessee or operator is required to follow procedures set forth by: Onshore Oil and Gas Order No. 1, The Conservation Division Manuals (as amended), the Federal Oil and Gas Royalty Management Act (as amended) and Title 43 Code of Federal Regulations, Section 3100.

The following sections describe typical oil and gas operations for the West HiLine planning area.

B. OIL AND GAS OPERATIONS

1. Geophysical Exploration

Geophysical exploration is a general term used for various indirect exploration methods, the most common being seismic and gravity surveys. Gravitational prospecting detects micro-variations in gravitational attraction caused by the differences in the density of various types of rock through the use of an instrument known as a gravimeter. Data derived from gravity surveys is used to generate anomaly maps, from which faults and general structural trends can be interpreted. Survey measurements are taken at many points along a linear path with a gravimeter. The gravimeter is transported either by backpack, helicopter, or off-road vehicle (ORV). Because gravity surveys can be conducted from the air or by a backpacker, surface disturbance is not necessary. However, surface disturbance may occur if ORV use is permitted for the purpose of conducting the survey.

Seismic surveys are the most popular indirect method currently utilized for locating subsurface structures which may contain oil and gases. Seismic prospecting is based on the fact that shock waves (waves similar to those created when a pebble is dropped into a pool of standing water) are reflected, refracted (bent) to varying degrees and travel at different speeds as they pass through different rock types. As the shock wave encounters layers where the lower rock unit causes the waves to travel slower, some of the wave (energy) is reflected upward to surface sensing devices called geophones.

The geophones are connected by ground wire to a data recording truck which stores data on magnetic tape. The time required for the waves to travel from the source of the wave down to a given reflecting rock unit and back to the geophone is related to the depth by multiplying the shock wave velocity by one half the travel time. For different rock types the average velocity is determined from bore hole and core data or must be estimated if no data is available.

Seismic surveys are conducted by sending shock waves, generated by a small explosion or through mechanically beating the ground surface with a thumping or vibrating platform, through the earth's surface.

The thumper and vibrator methods pound or vibrate the ground surface to create a shock wave. Usually four large trucks are used, each equipped with pads about 4-foot square. The pads are lowered to the ground and the vibrators are electronically triggered from the recording truck. Once information is recorded the trucks move forward a short distance and the process is repeated. Less than 50 square feet of surface area is required to operate the equipment at each recording site.

The small explosive method requires that charges be detonated on the surface or in a drill hole. Holes for the charges are drilled utilizing truck-mounted or air portable drills to drill small-diameter holes to depths of 100 to 200 feet. Generally 4 to 12 holes are drilled per mile of line and a 50-pound charge of explosives is placed in the hole, covered, and detonated. The created shock wave is recorded by geophones placed in a linear fashion on the surface. In rugged topography, a portable drill carried in by helicopter is often used to drill the holes rather than a truck-mounted drill.

The surface charge method utilizes 2 1/2 or 5 pound charges attached to wooden lath 3 feet above the ground surface. This type of charge results in the destruction of above ground vegetation, but this damage is usually undetectable after several growing seasons. The disadvantage of this type charge is its limited depth of shock wave penetration.

A typical drilling seismic operation may utilize 10 to 15 men operating five to seven trucks. Under normal conditions, 3 to 5 miles of line can be surveyed each day using the explosive method. The vehicles used for a drilling program may include heavy truck-mounted drill rigs, track mounted air rigs, water trucks, a computer recording truck, and several light pickups for the surveyors, shot hole crew, geophone crew, permit man, and party chief.

Public roads and existing private roads and trails are used where possible. However, off-road cross-country travel is also necessary in some cases. Graders and dozers may be required to provide access to remote areas. Several trips a day are made along a seismograph line; this usually establishes a well defined 2-track trail. Drilling water, when needed, is usually obtained from private landowners.

Terrain along the HiLine region is of the type which allows the use of thumpers or vibrotrucks. Therefore, geophysical exploration in this region should be accomplished with minimal surface disturbance.

2. Geophysical Operations

Geophysical operations may be conducted regardless of whether the land is leased or not. Notices of Staking, Applications for Permit to Drill, drilling activities and subsequent well operations can only be approved, subject to regulations, on leased lands.

Notices to conduct geophysical operations on BLM surface are received by the appropriate resource area. Administration and surface protection are accomplished through close cooperation of the operator and the BLM. Seasonal restrictions may be imposed to reduce fire hazards, conflicts with wildlife, watershed damage, hunting activity, etc.

An operator is required to file a "Notice of Intent to Conduct Oil and Gas Exploration Operations" for all geophysical activities on public lands administered by the BLM. The Notice of Intent, should include maps showing the line location and access routes, any anticipated surface damages and a time frame for operations. The operator must be bonded.

Written approval must be obtained prior to commencing any surface blading activities and the operator must contact the BLM when operations begin. The operator is required to comply with written instructions and orders given by the Authorized Officer at the prework conference, site inspection (if required) and during field investigations. Periodic checks during and upon

completion of the operation will be conducted to ensure compliance with the terms of the Notice of Intent.

Oil and gas can be discovered by either direct or indirect exploration methods. Direct exploration methods such as the mapping of rock outcrops and oil seeps, drill core analyses and drilling may lead to the discovery of oil and gas deposits whereas indirect methods, such as seismic and gravity surveys are used to delineate subsurface features which may contain oil and gas.

3. Drilling Permit Process

The federal lessee or operating company selects a drill site based on spacing requirements, subsurface and surface geology, geophysics, topography, and economic considerations. Statewide spacing regulations are established by the Montana State Board of Oil and Gas Conservation and are generally as follows:

Gas Wells: One well per 640 acres.
Oil Wells: 0 - 6000 feet: One well per 40 acres.
6001 -- 11000 feet: One well per 160 acres.
11001 - feet: One well per 320 acres.

Exceptions to spacing requirements involving federal lands may be granted after a BLM review.

4. Notice of Staking (NOS)

Once the company makes the decision to drill, they must decide whether to submit a Notice of Staking (NOS) or apply directly for a permit to drill. The NOS is an outline of what the company intends to do, including a location map and sketched site plan. The NOS is used to review any conflicts with known critical resource values. The BLM utilizes information contained in the NOS and obtained from the onsite inspection to develop stipulations to be incorporated into the APD. As a result of the Federal Onshore Oil and Gas Leasing Reform Act of 1987 (Reform Act of 1987), upon receipt of an NOS the operator/company name, well name/number, well location and a map showing the drill site must be posted in a public place in the Bureau approving office and the Bureau Resource Area Office or the local surface management agency office for a minimum of 30 days prior to approving the APD.

5. Application for Permit to Drill (APD)

The operator may or may not choose to submit an NOS; in either case, an Application for Permit to Drill must be submitted. An APD consists of two main parts: the 13 point surface plan which

describes any surface disturbances and is reviewed by resource specialist, and the eight point plan which details the drilling program and is reviewed by the petroleum engineer and geologist. For the APD option the onsite inspection is used to assess possible impacts and develop stipulations to minimize these impacts. If the NOS option is not utilized the 30 day posting period as required by the Reform Act of 1987, will commence upon receipt of the APD by the BLM.

In the HiLine region, an archaeological clearance is required. However, there may be exceptions to this policy on a case by case basis. Additionally, the BLM must prepare any site specific environmental documentation required by NEPA and develop mitigation measures necessary to protect any adversely affected resources. The BLM approves all wells drilled on federal minerals regardless of surface ownership, except on National Forest Lands where the BLM only approves the eight point drilling program. The BLM also approves wells drilled on leased Indian tribal or allotted lands, but has no control over Indian leasing decisions. For privately owned surfaces it is the responsibility of the operator to obtain a surface owner agreement.

6. Drilling Phase

Once the APD is approved, the operator may begin construction activities. When a site is chosen that necessitates the construction of an access road the length will vary, but usually the shortest feasible route is selected to reduce the haul distance and construction costs. Environmental factors or a landowner's wishes may dictate a longer route in some cases.

During this first phase the operator moves construction equipment over existing roads to the point where the access road begins. Depending upon the type of terrain, equipment may include dozers (track-mounted and rubber-tired) scrapers and graders. Existing roads and trails often require improvement in places and occasionally culverts and cattle guards are installed. Because of the topography, and because most HiLine wells are only 1,500 to 2,200 feet deep they can be drilled using a truck mounted rig. Thus, often times very little or no access road work is necessary and this phase of construction requires very little time.

The second phase is the construction of the drilling pad or platform. Again, in much of the HiLine area the relatively flat, grassland topography requires little work to prepare a drill pad. In some cases no disturbance other than a mud (reserve) pit and cellar is required. If surface disturbance is necessary, soil material suitable for plant growth is removed and stockpiled in a designated area, to be used later for rehabilitation and

reseeding. Drilling sites on ridge tops and hillsides are constructed by cutting and filling portions of the location after the topsoil has been removed. The majority of the excess cut material is stockpiled in an area that will allow it to be easily recovered for rehabilitation. It is important to confine extra cut material to a stockpile so that it can be recovered for rehabilitation of the drill site.

The amount of level surface required for safely assembling and operating a drilling rig varies with the type of rig, but is usually 200 feet by 250 feet for typical HiLine wells of 1,500 to 2,200 foot depths. Deeper wells will require larger pads because of the rig size and associated equipment. When construction of a drilling location requires cut and fill, the foundation of the drilling derrick is usually placed on a cut surface ensuring that it rests on solid ground, thereby preventing it from leaning or toppling due to settling of uncompacted soil.

In addition to the drilling platform, a reserve pit is constructed. The reserve pit is used to contain the drilling fluids and drill hole cuttings. It is usually square or oblong, but is sometimes constructed in other shapes to accommodate topography. Generally, the reserve pit is 6 to 12 feet deep, but may be deeper to compensate for smaller length and width for deeper drilling depths. In some instances mud tanks are utilized thus eliminating the need for a pit. For air drilling, smaller reserve pits are used; usually less than 10 by 10 feet and approximately 6 to 10 feet in depth.

Depending on how the drill site is located relative to a natural drainage, it may be necessary to construct water bars or diversions to control surface runoff and erosion. The area disturbed for construction and the potential for successful revegetation depends largely on topography, soil type, climate and the degree of disturbance.

Usually drilling activities begin shortly after the location and access road have been constructed. The drilling rig and associated equipment are moved to the location and erected.

Water for drilling is hauled or piped to the rig storage tanks or reserve pit from rivers, wells, reservoirs or private sources. Occasionally, water supply wells are drilled on or close to the drill site. Bentonite, a type of clay, is mixed with the water to form the main constituent of the drilling mud. A wide variety of other materials and chemicals may be added to enhance the mud properties. Drilling mud performs several important functions; it cools the bit, reduces the drag of the drill pipe on the sides of the bore hole, seals off any porous zones, aids in preventing an uncontrolled release of formation fluids, and carries the

cuttings to the surface. High pressure air is sometimes used in place of mud. The use of mud or air is largely dependent upon the target formation, drilling depth and type of completion desired. The drilling mud or air is circulated through the drill pipe to the bottom of the hole, through the bit and up the well bore. At the surface the mud and rock cuttings are returned to the reserve pit where gravity separates the two or they are mechanically separated through a screen. The mud is recycled and returned to the system for further use. When drilling with air the cuttings are blown into the reserve pit. Drilling muds are not allowed to contain any hazardous or toxic substances.

The actual commencement of the drilling is referred to as "spudding in". Initially, the drilling usually proceeds rapidly due to the unconsolidated nature of shallow formations.

Drilling is accomplished by rotating special bits bearing a controlled portion of the drill string weight. The rig structure and associated hoisting equipment bear the remainder of the drill string's weight. The weight on the bit is controlled to maintain as vertical a hole as possible or deviate from vertical when desired, and to prevent rapid wearing of the drill bit.

The combination of rotary motion and weight on the bit causes rock to be chipped away at the bottom of the hole. As mentioned earlier, these chips are then transported to the surface where they are disposed of into the reserve pit.

The rotary motion is created by a square or hexagonal rod, called a kelly, which fits through a square or hexagonal hole in a large turntable, called a rotary table. The rotary table sits on the drilling rig floor and as the hole is deepened the kelly descends. When the kelly has gone as deep as it can, it is raised and a piece of drill pipe about 30 feet in length is attached to the drill pipe in the hole. The drill pipe is then lowered, the kelly is raised and attached to the top of it, and drilling recommences. By adding more and more drill pipe the hole is steadily deepened.

Eventually, the bit becomes worn and must be replaced. To change bits, the entire string of drill pipe must be pulled from the hole. Once the bit is replaced the drill string is reassembled, lowered into the hole and drilling is started again.

Drilling operations are continuous, 24 hours a day, 7 days a week. The crews usually work three 8-hour shifts or two 12-hour shifts a day. Typical HiLine wells require 3 to 4 days to reach total depth. At periodic intervals, BLM personnel, usually petroleum engineering technicians, (PETs), will conduct inspections of the drilling rig and operations to ensure

compliance with the approved plans in the APD. If at any time the operator wishes to change the approved plans in the APD, verbal approval may be obtained, but must be followed up in writing.

Upon completion of drilling, the well is tested to determine its capability to produce hydrocarbons (oil and gas). If oil or gas is found in commercial quantities the well is completed as a producer. Typically, oil producing wells in the HiLine region require a pump jack, stock tanks, heat treating facilities and usually a water disposal pit. Gas wells in this region are mostly "sweet gas" wells, that is, they contain no hydrogen sulfide gas. Sweet gas production requires a meter house and a gathering line or marketing line to transport the gas. In some cases a compressor station is required to compress the gas to a pressure necessary for entry into a pipeline.

If liquid hydrocarbons (condensates) are produced with the gas a separator and storage facility are necessary. Gas wells which produce water require a small (10 by 10 foot) water disposal pit. Sour gas wells (those which produce hydrogen sulfide gas) require special wellhead equipment due to the corrosive nature of the hydrogen sulfide. The sour gas may be treated to remove any hydrogen sulfide prior to entry into a sales pipeline, but in most cases is sold to a gas plant for treatment.

Installation of production facilities generally requires little additional surface disturbance beyond that necessary for drilling. However, additional disturbance does result from pipeline and gathering line installations. Gas meter houses are usually 10 by 10 foot skid-mounted, steel sheds. Pumpjacks in this area are usually 8-10 foot in height, require a slightly larger surface area than a gas shack and may or may not be skid mounted. The gas house and pumpjack are usually situated over the well head on the same area where the drill rig was set up. Water disposal pits needed for the evaporation of water produced in association with hydrocarbons generally fit within the boundaries of the drilling pad. After the production facilities are installed the remaining drilling disturbances are reclaimed.

During the production phase, BLM monitors and approves field activities needed for well and field operation and regulation. Many operations, e.g. plugging, completion in a different zone, deepening, etc., require prior approval. Others such as acidizing and fracturing do not require prior approval, but a subsequent report of operations describing the operation in detail must be filed.

If the well is not productive in commercial quantities it is considered a dry hole. Dry holes and producing wells which can no longer produce in commercial quantities must be plugged and abandoned.

7. Plugging and Abandonment

When a well is no longer capable of producing in paying quantities or has no other beneficial use, the well should be plugged and abandoned.

The BLM is responsible for the protection of federal minerals, regardless of the surface management agency or private ownership of the surface.

Because each well is different, the plugging program for that well must be carefully designed. Federal minerals plugging programs are designed to:

(a) Prevent fluid migration between zones.
(b) Protect mineral resources from damage
(c) Isolate producing zones.

After the physical plugging is completed, the surface is reclaimed, per stipulations in the APD or the surface owner agreement.

Economic conditions dramatically affect drilling activity and at the present time oil and gas markets are depressed. However, an upturn in the petroleum market could create a significant increase in the number of drilling wells within the planning area as a great portion of the area has moderate to high oil and gas potential. The following sections briefly describe the planning areas historical, present and reasonably foreseeable oil and gas development.

C. Historical and Current Background

As with most parts of Montana underlain by sedimentary rock, the West HiLine planning area has a long history of oil and gas exploration and development. Production throughout the planning area is mainly from shallow, low pressure reservoirs of Cretaceous and older age. Most of the area's oil production occurs in Glacier and Toole Counties, whereas gas production occurs throughout the HiLine area. Table 1 lists, by county, the major oil and gas fields within the West HiLine planning area.

TABLE 1

Major Oil and Gas Fields (By County)

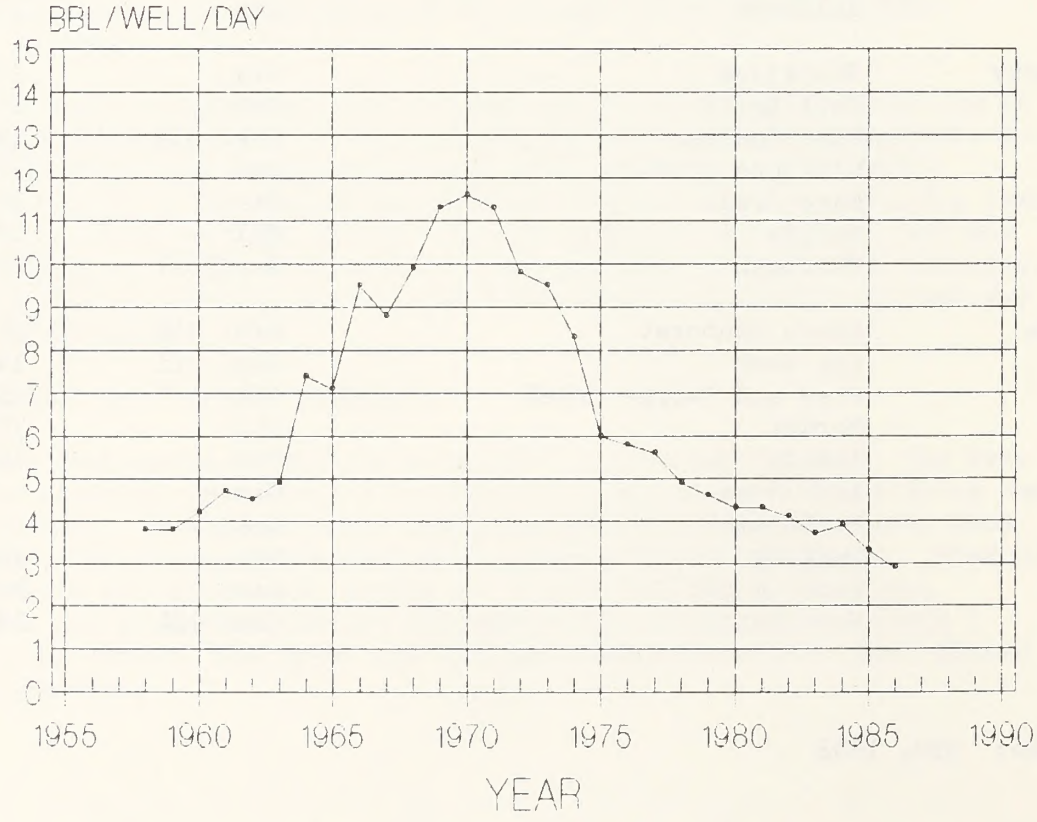
County	Field	Production	Discovery Date
Blaine	Battle Creek Field	Gas	1977
	Bullwhacker	Gas	1967
	Leroy	Gas	1968
	Sawtooth Mountain	Gas	1967
	Tiger Ridge	Gas	1966
	Tiger Ridge North	Gas	1966
	Rabbit Hills	Oil	1972
	Bowes Dome	Oil	1949
	Bullhook	Gas	1966
Chouteau	Sherard	Gas	1923
	Bullwhacker	Gas	1966
	Huebschwerlen	Gas	
Glacier	Cut Bank	Gas, Oil	1926/1932
Hill	Tiger Ridge	Gas	1966
	Bullhook	Gas	1966
Liberty	Blackjack	Gas	1968
	East Keith	Gas	1947
	Flat Coulee	Gas, Oil	1933
	O'Briens Coulee	Gas	1963
	Sage Creek	Gas	1975
	Utopia	Oil	1976
	Whitlash	Gas, Oil	1918
Toole	Kevin Sunburst	Gas, Oil	1922
	Cut Bank	Gas, Oil	1926/1932
	Fred and George Creek	Oil	1963
	Border	Oil	1929
	Amanda	Gas	1922
	Arch Apex	Gas	
	N. Dunkirk	Gas	
	Dunkirk	Gas	1981
	Prairie Del.	Gas	1975
	West Butte	Gas, Oil	1968

Source: BLM, 1988

The oldest and largest oil fields in the HiLine region, the Kevin Sunburst and Cut Bank fields, were discovered in 1922 and 1932 respectively. Since that time cumulative production from these fields exceeds 230,000,000 barrels of oil and 550,000,000,000 cubic feet of gas.

Although enhanced recovery techniques (mainly water flooding) have been tried since becoming technologically feasible; large cooperative efforts, e.g. secondary recovery units, did not get under way until the early 1960s. Figure 1, an oil production curve for the Northern Montana Region and Table 2, which shows oil production volumes for the Northern Montana region, illustrate the increased average daily production resulting from these secondary recovery efforts. The production figures (Table 1 and Figure 1) from these secondary recovery efforts show an increase through 1970. The decline shown after that is because most of these wells are in the declining stages of production.

FIGURE 1: NORTHERN MONTANA REGION OIL PRODUCTION



SOURCE: MONTANA OIL & GAS ANNUAL REVIEW

The Northern Montana region is a state designation and is shown on Map 1.

TABLE 2
OIL PRODUCTION AND WELL HISTORY FOR NORTHERN MONTANA

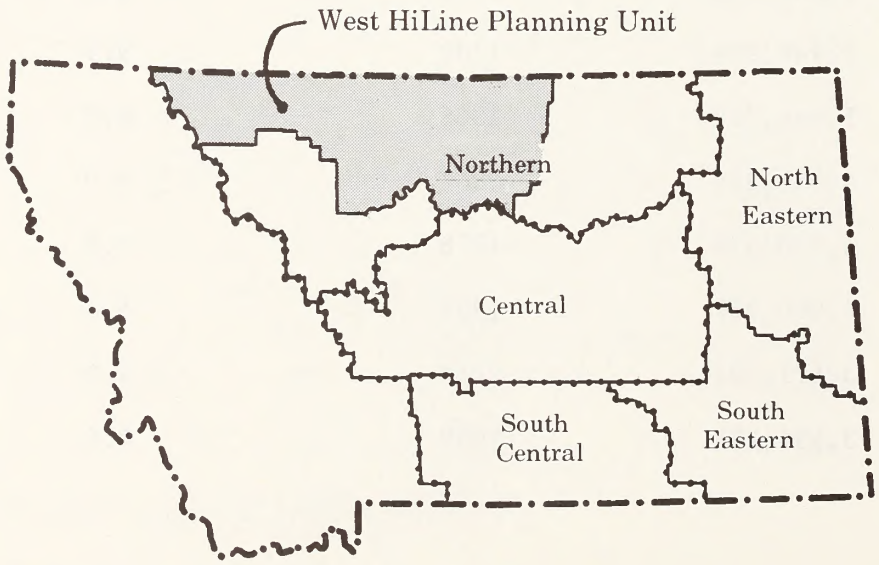
YEAR	PRODUCTION IN BBLS	NUMBER OF PRODUCING WELLS	AVERAGE DAILY PRODUCTION IN BBLS/WELL/DAY
1958	4,348,256	3120	3.8
1959	4,307,739	3067	3.8
1960	4,332,218	2811	4.2
1961	4,211,017	2447	4.7
1962	4,252,304	2615	4.5
1963	4,530,510	2550	4.9
1964	5,705,948	2216	7.4
1965	6,826,261	2649	7.1
1966	7,991,302	2308	9.5
1967	6,758,280	2097	8.8
1968	6,883,493	1898	9.9
1969	7,557,966	1827	11.3
1970	7,680,831	1806	11.6
1971	7,292,476	1768	11.3
1972	6,646,908	1856	9.8
1973	5,948,826	1708	9.5
1974	5,464,319	1802	8.3
1975	4,551,324	2067	6.0
1976	4,200,539	1978	5.8
1977	4,060,957	1999	5.6
1978	3,671,322	2052	4.9
1979	3,536,296	2089	4.6

TABLE 2 (CONT)
OIL PRODUCTION AND WELL HISTORY FOR NORTHERN MONTANA

YEAR	PRODUCTION IN BBLS	NUMBER OF PRODUCING WELLS	AVERAGE DAILY PRODUCTION IN BBLS/WELL/DAY
1980	3,516,807	2,212	4.3
1981	3,605,207	2,280	4.3
1982	3,680,043	2,455	4.1
1983	3,682,130	2,693	3.7
1984	3,708,185	2,610	3.9
1985	3,419,300	2,803	3.3
1986	3,220,769	3,017	2.9
TOTAL	145,591,533	N/A	N/A
Average	5,020,398	2,303	6.3

Source: Montana Oil and Gas Annual Reviews, 1958-1986

Map 1. Montana Producing Regions



The Tiger Ridge field, and its related surrounding fields, is currently the largest gas producing region in the planning area. The Tiger Ridge field covers nearly 53,000 acres and has produced more than 75,000,000,000 cubic feet of natural gas since discovery in 1966.

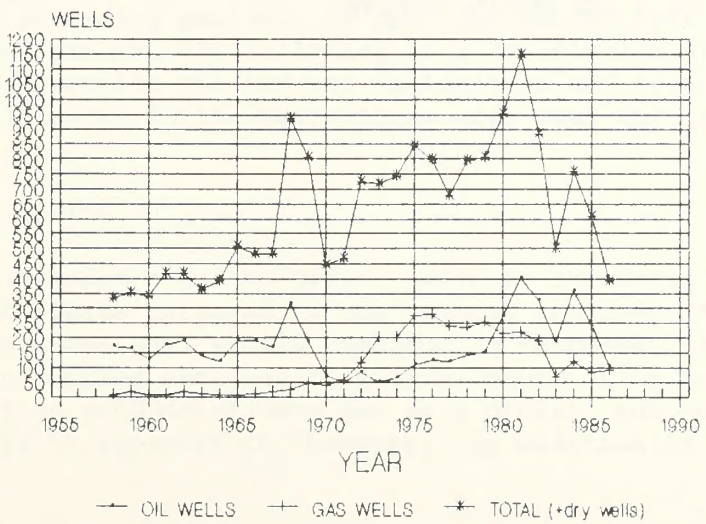
Because of low gas prices (about $.10 per 1000 cubic feet in 1966) most early exploration was for oil and many wells capable of producing gas were considered to be of little or no value. However, wells drilled near existing pipelines and markets were produced. In the early 1970s the demand for natural gas increased as did its price and the level of exploration and development.

Figure 2 shows the increased number of gas wells drilled in the early 70s as the price started to increase. In the early 80s the gas market became soft because of the number of gas wells completed. This resulted in less drilling for gas. The gas "glut" is still with us at present however, the wells drilled in the early 70s will start to decline in production and drilling should pick up again in the future.

Figure 3 shows the number of producing wells (oil and gas) in the Northern Region. The early 70s were influenced by both the oil embargo and subsequent shortage and the better market for gas. The total number of producing wells has increased in a steady manner since the early 70s because of these factors. If the oil prices stay low and the gas market stays soft we may expect the number of producing wells to stay at this level or possibly decline. There may be a one for one replacement of producing wells, one well gets abandoned and another gets completed.

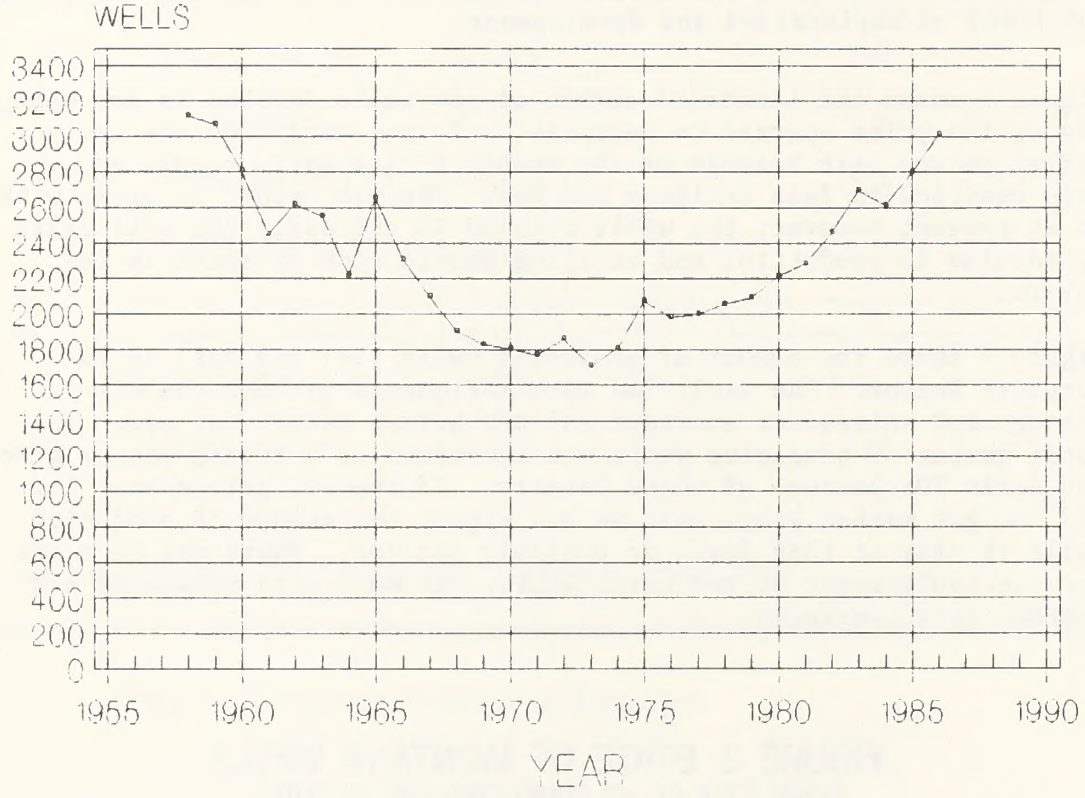
FIGURE 2: STATE OF MONTANA WELLS

COMPLETED OIL VS COMPLETED GAS VS TOTAL*



* TOTAL WELLS INCLUDES DRY HOLES
SOURCE: MONTANA OIL & GAS ANNUAL REVIEWS

FIGURE 3: NORTHERN MONTANA PRODUCING WELLS



SOURCE: MONTANA OIL & GAS ANNUAL REVIEWS

Table 3 and Figure 4 show the total number of wells drilled in the HiLine counties, versus the federal wells drilled in those same counties. Figure 5 through 10 show a county by county breakdown of this information. The federal drilling reflects the trend of the total. Unless there is a major shift in state or federal taxation or regulation, BLM would expect to see the number of federal wells drilled to follow the trend of total wells. If the drilling goes up the number of federal wells drilled would increase. If drilling declines federal drilling would probably decline.

Each county has federal production and in most of the counties the federal production is a significant portion of the total (see Table 4).

D. Present Activity

Presently about 887,178 barrels of federal oil and 8,912,700,000 cubic feet of federal natural gas are produced each year in the planning area. However, oil production is declining as the reserves in Kevin Sunburst and Cut Bank fields are being depleted.

In 1986, the average oil production in the Northern Montana region was 2.9 barrels per well per day. This low level of production is possible because reservoirs in this region are shallow and production costs are less than those for deeper wells. In addition, most oil is produced by independent operators who have lower overhead and operating costs than a major oil company. Thus, they are able to produce these wells down to a lower production rate and smaller profit margin. However, as production rates continue to decline, more and more of these wells will become uneconomic and will require plugging.

As of January, 1988, there were approximately 995 active, unreclaimed well sites on federal minerals within the planning area. Each of these sites creates an estimated 2 acres of surface disturbance.

E. Reasonably Foreseeable Development Activity

Based on the preceding analysis of past and current oil and gas activities and trends, the following is a description of the reasonably foreseeable oil and gas exploration and development activity anticipated in the West HiLine area over the next 10 to 15 years.

1. Oil Production

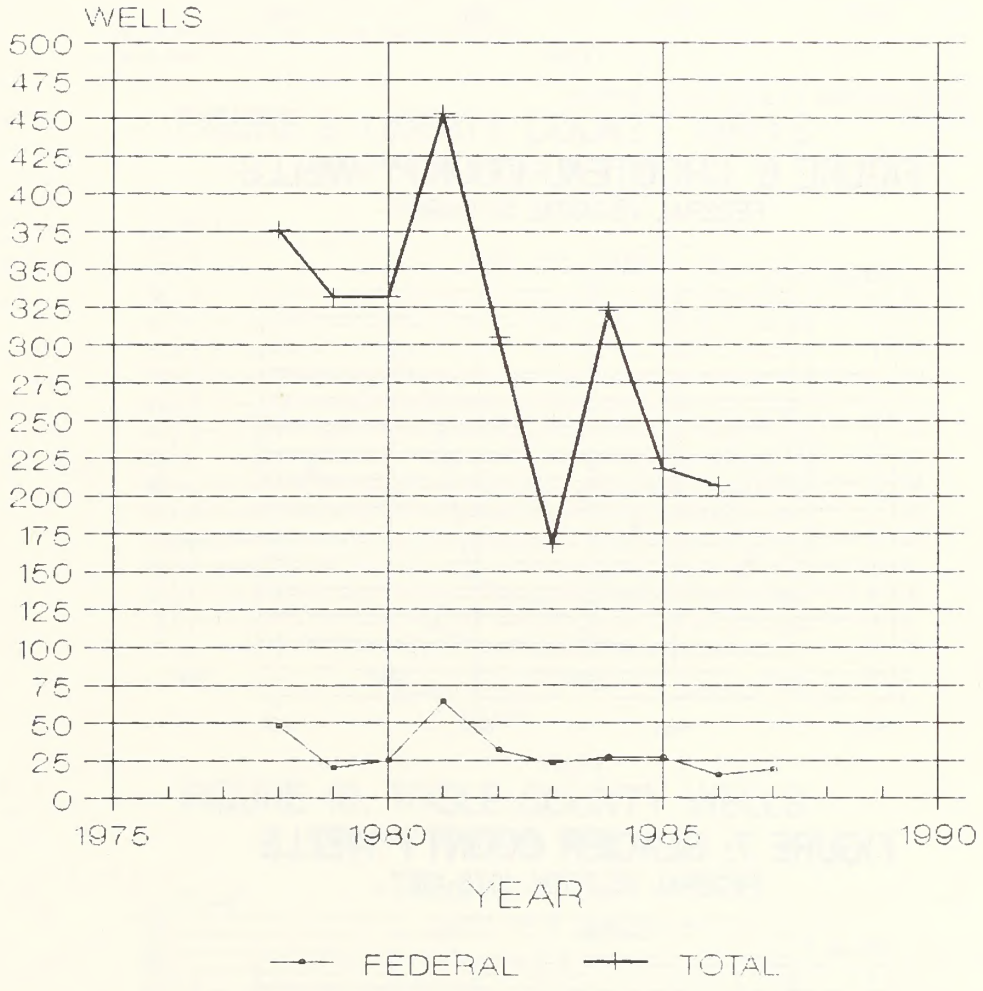
Oil exploration and development wells in the Kevin Sunburst and Cut Bank fields targeted to the present producing formation (Madison Limestone) should continue to decrease. As the average daily production declines to a level where it is no longer possible to produce oil and gas at a profit, the number of well pluggings is expected to increase. In addition to plugging, some

TABLE 3
FEDERAL AND NON-FEDERAL HILINE WELLS DRILLED

Year	Blaine	Choteau	Glacier	Hill	Liberty	Toole	TOTAL
1978							
FEDERAL	41	0	1	1	2	3	48
TOTAL	111	27	29	67	33	109	376
1979							
FEDERAL	12	2	1	0	2	3	20
TOTAL	69	16	26	56	45	120	332
1980							
FEDERAL	14	0	0	0	0	11	25
TOTAL	55	25	50	39	55	108	332
1981							
FEDERAL	20	3	1	1	4	35	64
TOTAL	90	32	48	44	46	193	453
1982							
FEDERAL	8	2	2	5	2	13	32
TOTAL	35	18	36	29	14	173	305
1983							
FEDERAL	5	5	1	1	1	10	23
TOTAL	19	15	29	10	10	85	168
1984							
FEDERAL	8	1	0	0	0	18	27
TOTAL	33	10	40	32	9	199	323
1985							
FEDERAL	10	2	0	0	2	13	27
TOTAL	28	4	37	29	3	117	218
1986							
FEDERAL	10	1	0	0	0	4	15
TOTAL	38	14	35	23	1	96	207.
1987							
FEDERAL	5	0	0	1	1	12	19
TOTAL	*	*	*	*	*	*	*
TOTAL							
FEDERAL	133	16	6	9	14	122	300
TOTAL	478*	161*	330*	329*	216*	1200*	2714*

*Non-federal well information for 1987 is not available at this time.
**Data does not include Indian wells
Source: BLM, 1988
Montana Oil and Gas Annual Reviews, 1978-1986.

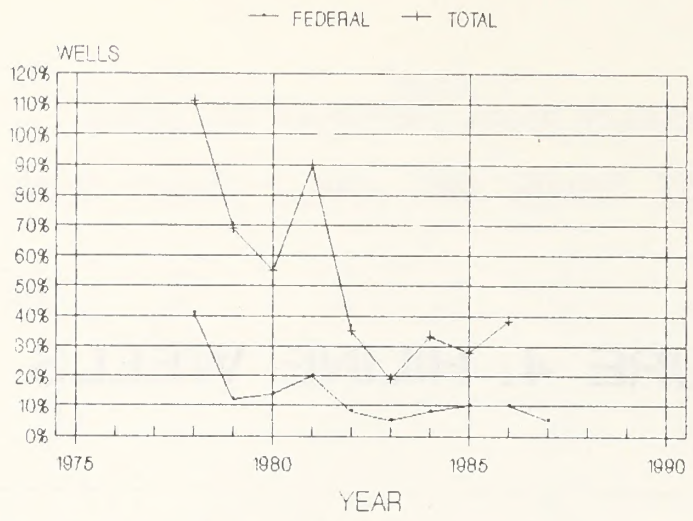
FIGURE 4: HILINE WELLS



SOURCE: MONTANA OIL & GAS ANNUAL REVIEWS

FIGURE 5: BLAINE COUNTY WELLS

FEDERAL VS TOTAL 1978-1987



SOURCES:MONTANA OIL & GAS ANNUAL REVIEWS
BLM,1988

FIGURE 6: CHOUTEAU COUNTY WELLS

FEDERAL VS TOTAL 1978-1987

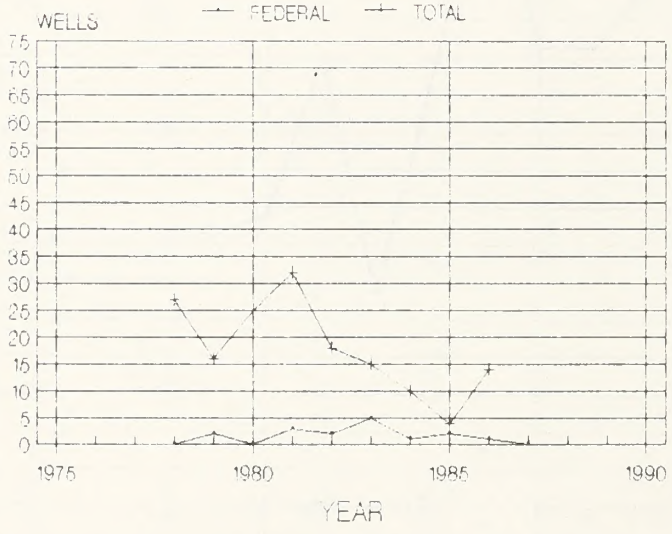


FIGURE 7: GLACIER COUNTY WELLS

FEDERAL VS TOTAL 1978-1987

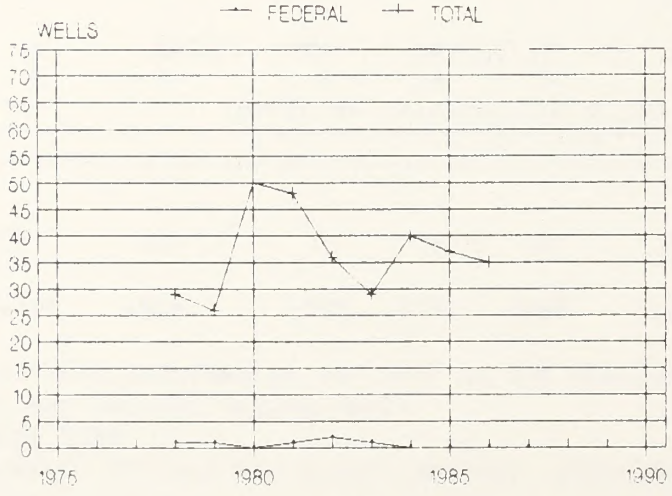
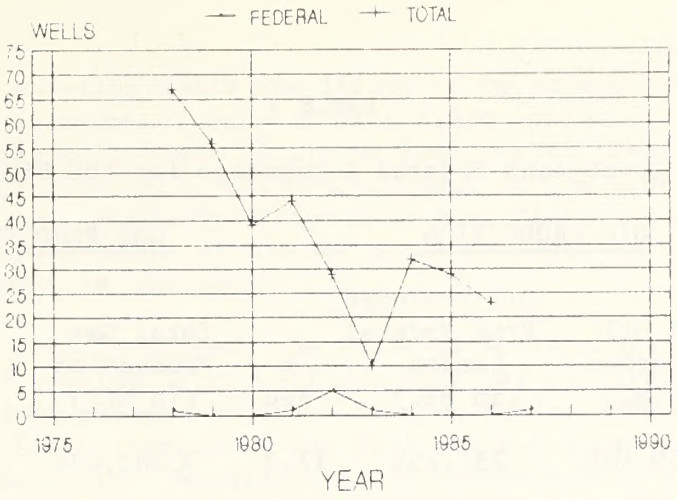


FIGURE 8: HILL COUNTY WELLS
FEDERAL VS TOTAL 1978-1987



SOURCES:MONTANA OIL & GAS ANNUAL REVIEWS
BLM, 1988.

FIGURE 9: LIBERTY COUNTY WELLS
FEDERAL VS TOTAL 1978-1987

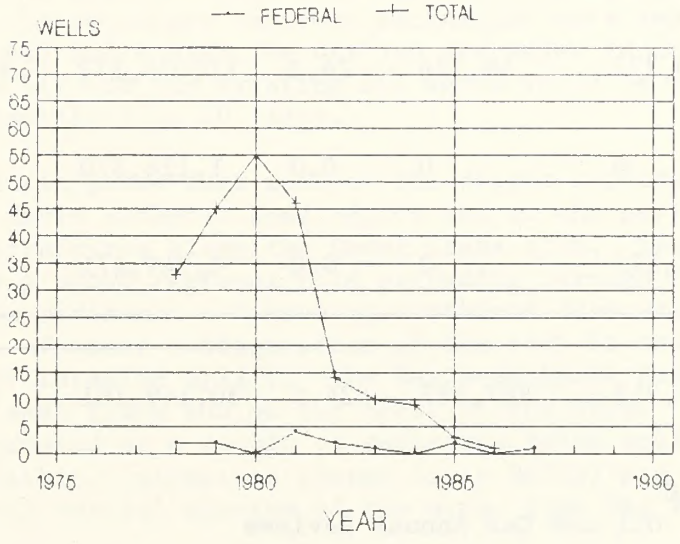
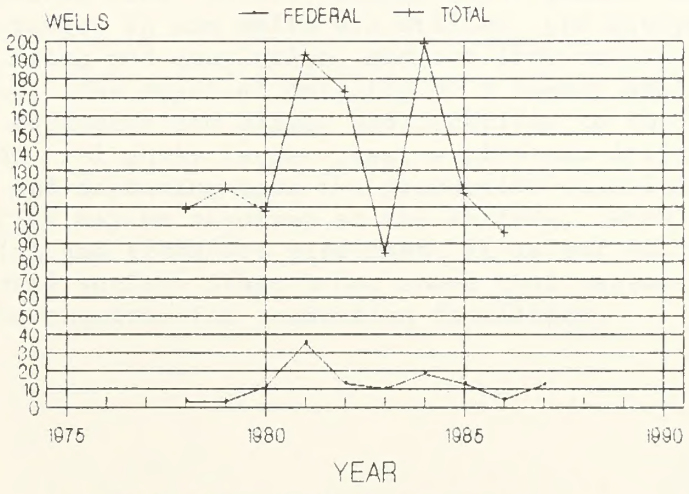


FIGURE 10: TOOLE COUNTY WELLS
FEDERAL VS TOTAL 1978-1987



SOURCES:MONTANA OIL & GAS ANNUAL REVIEWS
BLM, 1988

TABLE 4

Production by County and Federal Percentage for the HiLine Region 1984

	OIL PRODUCTION			GAS PRODUCTION		
County	Total Oil Production (in BBL)	Oil Produced From Federal Leases (in BBL)	% Fed	Total Gas Production (in MCF)	Gas Produced From Federal Leases (in MCF)	% Fed
Glacier	1,359,188	234,259	17.2	3,062,034	256,428	8.4
Liberty	381,247	277,004	72.7	2,252,765	432,924	19.2
Toole	1,750,933	329,808	18.8	5,884,349	984,420	16.7
Blaine	190,774	46,116	24.2	11,074,172	4,937,400	44.6
Chouteau	0	0	0.0	1,126,370	835,416	74.2
Hill	2,175	0	0.0	6,749,471	1,466,112	21.7
TOTAL	3,684,317	887,187	24.1	30,149,161	8,912,700	29.6

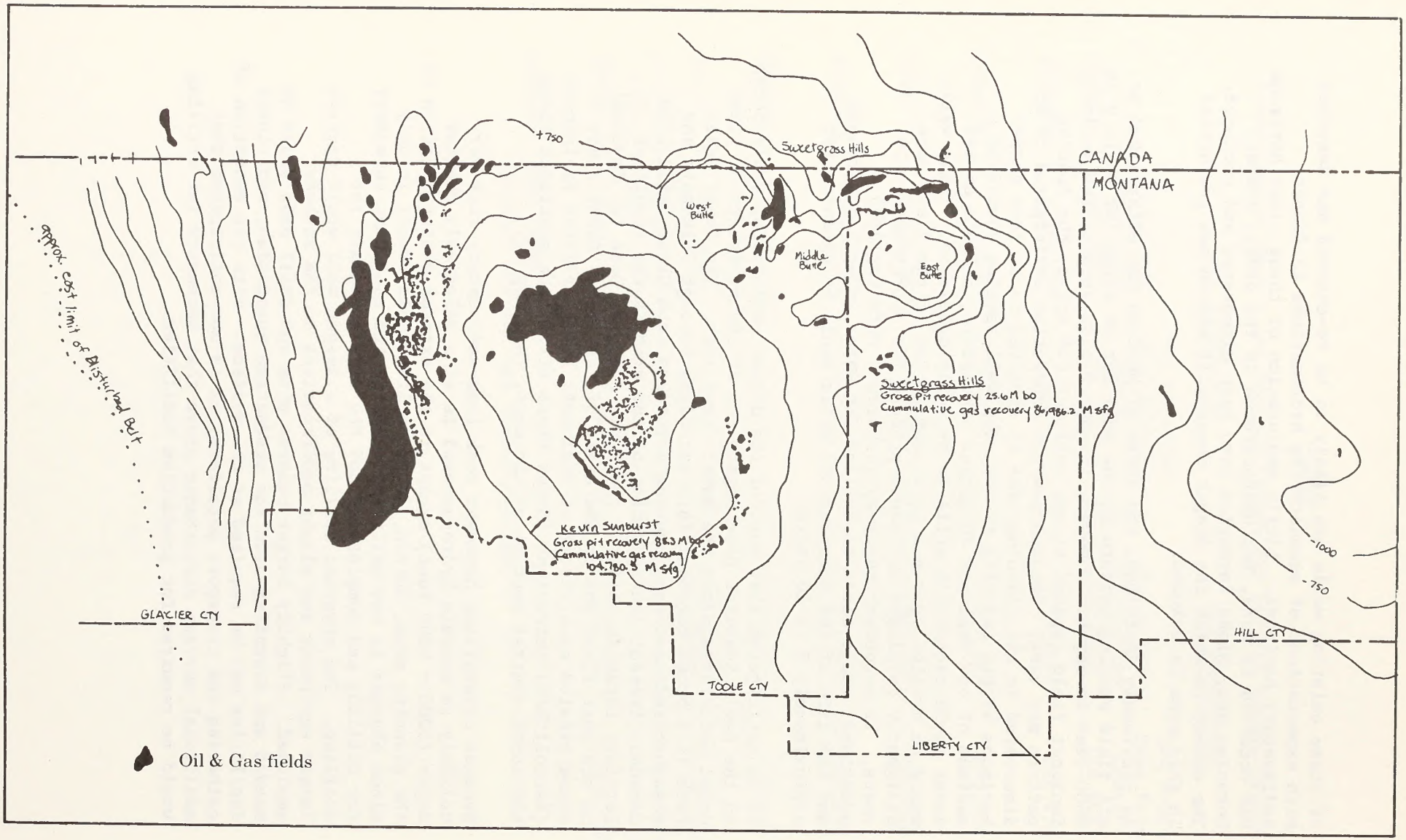
Source: BLM, 1988
Montana, Oil and Gas Annual Reviews

of these existing wells are likely to be re-entered and deepened with expectations of encountering hydrocarbons in deeper sedimentary horizons. Little exploration of these older horizons has occurred to date, but hydrocarbons in the older, deeper, Devonian age, Nisku formation have been discovered and produced. The extent to which the deeper zones will add to new production in this area is unknown.

As previously described, the State of Montana has established an oil field spacing pattern of one well per 40 acres for wells 0 to 6000 feet in depth. However, in some fields such as the Kevin Sunburst field (spaced at one well per 4.4 acres) the spacing pattern may vary. Because new oil production anticipated to be discovered in the planning area is expected to be from deeper horizons within existing fields, the well spacing should be a maximum of one well per 40 acres. Therefore, a field of 640 acres would require 16 wells to be fully developed. These wells would be drilled over a 2 to 8 year period if the field were diligently developed and would produce for approximately 20 years. If secondary recovery techniques were employed, additional wells might be drilled for water injection purposes and the life of the existing oil wells would be extended for approximately 5 to 20 years.

It is anticipated that most of the deeper exploration would occur in the Kevin Sunburst Dome region and at the periphery of other domal structures along the Sweet Grass Arch. The Sweet Grass Arch is a broad regional fold extending through Paleozoic and Mesozoic sediments and running northward from Great Falls into Canada. Present configuration of the arch is the result of Tertiary Laramide uplift. The Kevin-Sunburst Dome is "Imposed" on the west flank and on the crest of the arch. Other minor domes created as a result of sediments being uplifted by igneous (laccolithic) intrusions (Sweet Grass Hills) are scattered along the north central section of the arch, (see Map 2).

Because crystalline basement rock (non-sedimentary rock very unlikely to contain hydrocarbons) is at a relatively shallow depth (5000 - 6000 feet) except in the extreme western portion of the planning area, future, deeper wells should result in only minor changes in how wells are drilled, the equipment necessary for drilling and completion, and the time necessary for drilling. The physical drilling of a deeper well would require larger equipment and slight modifications to the methods employed. Slightly larger reserve pits and drill pads would be needed and depending upon the production quantities, additional facilities may be required at the surface. With the exception of gathering and transport pipelines, it is not anticipated that additional surface disturbance above that necessary for drilling would be required for production facilities.



Map 2. Oil and Gas fields in the portion of the Sweet Grass Arch found in the West HiLine Planning Area

With very little data on deep wells in the planning area, it is difficult to predict an average time required to drill to an older productive horizon, but it is estimated at 3 to 5 weeks for an exploratory hole and 10 to 20 days for a development well. Testing, logging and completion are estimated at 3 to 5 days.

Although no large oil field discoveries are expected within the planning area, continued exploration is anticipated. The rate of exploration should be in direct response to the price of oil. With domestic consumption rising and the increasing dependency on foreign oil, we can expect oil prices and domestic exploratory activity to increase over the next decade.

2. Gas Production

The State of Montana sets spacing unit sizes for the production of gas. Although the federal government is not bound by these spacing unit sizes, they are generally recognized. Until recently, most gas fields in the planning region were spaced to allow one well per 640 acres. Within the past several years many operators have requested a decrease in the size of the spacing unit, or for permission to drill an additional well per spacing unit. These requests resulted from data indicating that one well per 640 acres is not effectively draining the gas reservoirs in certain fields. As additional data is obtained, it is probable that more and more fields will be delineated for the production of gas based on one well per 320 acres.

As a result of these spacing changes, a typical, future, HiLine gas field with a surface area of 3200 acres could be expected to require 10 wells to be fully developed. Assuming diligent development, these wells would be drilled over a 5 to 10 year period and the field should produce for 20 to 25 years. Larger fields will of course require a longer time to develop, thus extending the life of the field. The converse is true for smaller fields. Because 80% to 95% of the original gas in place can be recovered from a typical gas reservoir, no secondary recovery techniques are used.

Further development will continue in the existing gas fields to satisfy contract quotas, as existing individual well production declines due to depletion, and as a result of spacing changes.

Future exploration will most probably occur, as in the past, along the margins of existing fields as stepout wells. These exploratory wells will better delineate the boundaries of existing fields and will probably result in the discovery of several new fields over the next decade. These new discoveries should be comparable in depth, size, reserves and areal extent as existing fields in the area. No new large field, e.g. Tiger Ridge, discoveries would be anticipated within the next 10 to 15 years.

Given a sudden increase in the demand for natural gas or a sharp increase in price, a large exploration or development program throughout the planning area could develop very rapidly. This is primarily due to the relatively shallow existing reservoirs and the accessibility of land in the area. However, one of the major problems with developing and exploring for natural gas in Montana is the inability to transport produced gas to eastern and western markets. The Northern Natural Gas Company and Montana Power Company are continuously expanding their pipeline systems. Because most companies generally will not intensively or

diligently drill an area when there is little or no market for the gas, future expansion of this pipeline network should promote exploration and development of new and existing fields, and, whenever necessary, allow for rapid exploration and development of oil and gas resources in the planning area.

3. General Oil and Gas Drilling Activity

Based on past activity and professional judgement it is reasonable to expect at least one cycle of increased drilling activity over the next decade, and for approximately 30 to 35 non-Indian, federal wells to be drilled each year over the next 10 to 15 years. This means approximately 300 to 525 wells could be drilled on public minerals throughout the life of this plan mostly within or around current existing fields. Each of these sites would create an estimated 2 acres of surface disturbance.

Several (2-3) new gas fields approximately 3,200 acres in size and composed of 10 wells each may be developed. No new oil fields are expected but expansion and further development of existing fields is anticipated.

It must be pointed out that future exploration does not necessarily mean an increase in the number of producing wells. Table 5 summarizes the wells drilled throughout Montana (except for Indian wells) between 1958 and 1986 and clearly illustrates that only a small percentage of exploratory wells are completed as producers. In addition BLM can expect an unknown number of wells to be plugged and abandoned in this time period.

Recent economic conditions within the oil industry resulted in a sharp decline in the number of active exploratory wells and the number of developmental wells. A turn around in the oil industry or an increase in the price of oil purchased from abroad, would spur an increase in oil and gas activity in the planning area. Continued low oil prices and depressed economic conditions would result in an increase in the number of abandonments and a decrease in domestic exploration and development.

TABLE 5
MONTANA WELL SUMMARY FOR 1958 - 1986

	DEVELOPMENT WELLS DRILLED			EXPLORATORY WELLS DRILLED			TOTAL WELLS DRILLED		
YEAR	OIL	GAS	DRY	OIL	GAS	DRY	OIL	GAS	DRY
1958	159	7	46	12	2	109	171	9	155
1959	156	12	71	7	6	101	163	18	172
1960	114	4	58	14	3	150	128	7	208
1961	169	6	60	7	2	173	176	8	233
1962	182	16	57	8	2	154	190	18	211
1963	131	6	60	8	5	152	139	11	212
1964	100	7	109	22	3	150	122	10	259
1965	177	9	107	14	1	199	191	10	306
1966	179	9	96	10	3	185	189	12	281
1967	162	14	104	7	5	191	169	19	295
1968	300	14	89	15	13	509	315	27	598
1969	171	44	105	15	5	466	186	49	571
1970	60	30	63	12	11	272	72	41	335
1971	49	36	34	3	22	323	52	58	357
1972	79	97	87	7	19	435	86	116	522
1973	46	165	100	6	36	366	52	201	466
1974	58	179	212	7	21	265	65	200	477
1975	105	261	222	6	15	236	111	276	458
1976	106	264	169	17	8	223	123	281	392
1977	98	220	188	24	19	129	122	239	317
1978	123	223	232	21	15	179	144	238	411
1979	120	235	182	35	20	211	155	255	393

TABLE 5 (CONT)
MONTANA WELL SUMMARY FOR 1958 - 1986

	DEVELOPMENT WELLS DRILLED			EXPLORATORY WELLS DRILLED			TOTAL WELLS DRILLED		
YEAR	OIL	GAS	DRY	OIL	GAS	DRY	OIL	GAS	DRY
1980	241	203	206	30	12	260	271	215	466
1981	276	133	188	126	85	341	402	218	529
1982	263	145	120	64	46	248	327	191	368
1983	160	55	88	25	16	156	185	71	244
1984	327	99	87	33	21	189	360	120	276
1985	227	84	90	16	2	192	243	86	282
1986	90	81	69	11	10	130	101	91	199
TOTAL	4428	2658	3299	582	428	6694	5010	3095	9993

F. CUMULATIVE IMPACTS OF THIS SCENARIO

This section describes the cumulative impacts, by resource component, of the preceding oil and gas development scenario on public minerals during the life of this RMP.

1. Air Quality

Air quality would be slightly affected locally by all stages of oil and gas development, including exploration, development, production and abandonment. Dust created during road and drilling pad construction increases particulate concentrations in the air. This problem would be worst during dry and windy weather, aggravated by the semi-arid climate and high winds that occur through most of the planning area. These impacts are localized and of short term duration. These concentrations would be relatively minor when compared to the increases from the continued use of roads by oil and gas maintenance personnel, landowners and lessees, and the general public for recreation purposes. Emissions from internal combustion engines would also contribute to particulate loading.

Dust from traffic and smoke and other emissions from vehicles and stationary engines used in the drilling operations would be the primary air pollutants during development of oil and gas wells. During the production stage, potential pollutants such as carbon monoxide, hydrocarbons, nitrogen oxides, sulphur oxides and hydrogen sulfide could occur in separation facilities, during disposal of liquid water and unwanted gas, by the burning of waste petroleum products, by the emission of objectionable odors and by the venting of noxious vapors from storage tanks. Locally significant air pollution could occur during production if a system failure resulted in accidental explosions, blowouts, oil spills or leaks.

Direct air contamination from oil and gas operations would cease on abandonment, but the continued use of roads and trails by the public could produce some dust in the immediate area for years to come.

The future effects of 300-525 new wells on federal lands in the planning area would be primarily from wind generated dust during construction operations and are considered short-term, local impacts.

Cumulatively, impacts to air quality from oil and gas operation in the planning area, have been and will continue to be insignificant.

2. Soils

Soils are usually affected by oil and gas operations in two ways - surface disturbances and soil compaction. A third kind of impact, the spilling of fluids on the soil, can also occur.

Soils disturbed by building drill pads, access roads and pipelines would be prone to accelerated erosion because of the removal of protective vegetation and litter cover. Protective cover binds the soil, provides desirable surface texture for infiltration of water and air and protects the surface from compaction by raindrops. Wind and water erosion on bare soil surfaces would cause more sediment offsite, creating additional soil cover damage and further increasing erosion. The total effect on erosion would be moderate overall, but significant where surface disturbances occurred on slopes greater than 30%, in areas of fragile or unproductive soils (such as those in river breaks).

Soil losses would be more severe if the topsoil were not stockpiled during construction for later use. Impacts would be greatest on shallow, soils of low productivity and on the deep, fertile, highly productive soils on moderately sloping to steep landscapes.

The weight of trucks or other heavy equipment on the ground surface compacts the soil, causing spaces within the soil profile to collapse. The soil is rendered more dense, less porous and less permeable. Compaction often severely reduces the infiltration capacity of the soil, leading to increased surface runoff and the possibility of accelerated gully and channel erosion. Compaction will also limit vegetation production.

The effects of compaction would vary with soil type, climate and the degree of the compacting potential. Effects would be most severe when soils are wet. This occurs frequently during the spring and early summer months and occasionally during the fall.

Compaction would also be affected by how often trucks or other heavy equipment passed over the surface. Impacts would be significant where access trails were used continuously, particularly during wet periods. Seismic surveys would cause significant impacts when their heavy vehicles passed along survey lines during wet periods.

A third kind of impact on soils could be caused by oil spills or the discharge of salt-enriched water from wells and treaters. These fluids might affect the soil severely in a relatively localized area. Toxic and saline concentrations from the fluids would often be capable of sterilizing the soil.

Oil spills have significant short-term impacts on vegetation, but they break down naturally with time and don't result in serious long-term erosion problems. Salt water spills which are sometimes associated with oil production can have more serious long-term impacts.

There would be a possibility of localized, severe erosion due to loss of vegetation by oil or saltwater spills or, improper construction. These oil or salt water spills may flow down slope into drainages.

If the lands associated with oil and gas activity are reclaimed they will reestablish with native vegetation over time. The length of time required for the lands to develop the production capability they had before oil and gas operations where spills occur, is often so great (many decades to centuries), that this is considered a long-term, moderate residual impact.

Depending upon the number of developed wells in a given area, unreclaimed lands could cause a substantial loss in land productivity. Assuming that an average drilling site, including wells, pads, storage tanks, service roads, etc., would disturb an estimated 2 acres of land surface, then, at maximum development, the amount of productive land lost to oil development would likely approximate 32 acres per square mile (5% of 640 acres), or about 6.4 acres per square mile (1% of 640 acres) for lands developed for natural gas production.

Specifically, these impacts will occur within the developed oil and gas field boundaries, where impacts could be locally significant if erosion or spills occur. Overall impacts to the planning areas would be considered slight.

3. Water

Surface Water - Oil and gas activities could impact surface water quality as erosion and sedimentation are accelerated on disturbed areas. Mitigation outlined in current oil and gas regulations and policies will lessen these impacts. The average disturbance per well site is estimated at 2 acres. The 995 existing wells and 525 potential wells would result in a total disturbance to approximately 3,000 acres. The cumulative impacts of any accelerated erosion on these 3,000 acres to water quality will be insignificant when compared to the erosion and sedimentation occurring on the entire 626,098 acres in the planning area.

Produced water in the planning area has a total dissolved solids (TDS) content ranging from 3,000 parts per million (ppm) to 10,000 ppm. Water with a TDS concentration less than 7,000 ppm is suitable for livestock use and has been used for that purpose

in several locations in the planning area. All water produced from oil and gas wells is disposed of in accordance with NTL-2B regulations.

Produced water not used for livestock is evaporated from pits. Pits may be lined if the produced water is higher in TDS concentration than the nearest aquifer. Wells producing greater than five barrels per day on a monthly average are required to inject the produced water back into the formation from which it came. EPA regulates this underground injection control program.

Accidental spills are reclaimed in accordance with existing contingency plans as are any other unforeseen accidents.

Due to existing regulations and contingency plans, cumulative impacts to surface water quality are expected to be insignificant.

Ground Water - As with surface water, existing regulations governing drilling, plugging and abandoning oil and gas wells will lessen impacts to ground water quality.

Produced waters and enhanced recovery waters are injected back into the aquifers from which they came under EPA regulations.

Evaporation ponds cannot store water with TDS concentrations greater than that of the nearest aquifer unless lined. If a leak should develop in a liner, contingency plans exist which require the oil or gas company to reclaim the impacted aquifer.

Cumulative impacts to ground water quality from oil and gas activities are expected to be insignificant.

Seismic Exploration - Regulations governing seismic exploration activities do not exist to the extent they do for other oil and gas activities. Impacts to surface water quality are not expected to be significant. However, impacts to ground water quality and quantity could be locally significant.

Shallow (less than 500' deep) stock and domestic wells have the greatest potential for being impacted by seismic activity. Underground detonations could cause cross contamination of aquifers, reduced water yields, or lowered static water levels.

Cumulative impacts from seismic activity to ground water quantity and quality is not expected to be significant, but localized significant impacts could occur.

4. Cultural Resources

Cultural sites could be affected by the loss of the opportunity

to examine artifacts in their true relationship with one another and the destruction of features, particularly in areas where there is a high concentration of sites. Most of these impacts are created by the surface disturbances associated with oil and gas exploration and development. Generally, the specific locations of oil and gas developments are somewhat flexible, so most impacts to cultural resources can be avoided by relocating the developments. If this is not possible, mitigation would be prescribed for significant sites in accordance with BLM policy and federal regulations.

5. Vegetation

The direct impacts to vegetation from oil and gas operations would come from destruction of the vegetation caused by construction of seismograph trails, drainage crossings, drill pads, roads, pipelines and other facilities.

Site specific impacts to vegetation would vary from moderate to significant depending on the stage of oil and gas development and site location.

Potential offsite impacts to wetland vegetation could occur because of siltation of streams from surface disturbances, increased water temperatures from treater facilities, contamination of water by oil spills and the release of chemicals into surface drainages. These impacts are considered minor because stipulations applied during seismic, exploration and production phases require avoidance of sensitive areas.

Invader species and noxious plants might replace native species on some disturbed sites exposed to a seed source. The spread of invaders to offsite areas would have a negative effect on the composition of vegetation. The vehicles and equipment used during oil and gas exploration and development could spread noxious plant seeds. The rehabilitation of the area and the seeding of native species suitable to the soils and climate would reduce the time required to replace the present plant composition if overrun by invader annuals and perennials. Despite weed control and rehabilitative seeding, noxious plants would crop up in most areas.

The length of time required for restoration of native species would depend upon the composition of the vegetation disturbed. Grassland vegetation types can usually be restored within five growing seasons, so the negative impact would be short-term. Sagebrush and other woody vegetation communities generally require more time for rehabilitation. Stable predisturbance vegetation communities should be present within 20-30 years.

The length of time needed for rehabilitation, in this case, would be dependent upon the condition of the site. Current disturbance is generally found in grassland communities and the future development of 300-525 wells is expected to occur in similar areas. Thus, vegetation will sustain locally moderate impacts until sites are reclaimed. However, these impacts are considered minor overall.

6. Fire

Historically, fire occurrence in this area has been very low. Through a combination of climatic, topographic and vegetative factors, wildfires aren't a common occurrence.

Prescribed fire, being considered for this area, would not create any unreasonable problems for planned burning. Additional access into previously unaccessible areas would help by providing access for suppression. This mineral development scenario over the next 10-15 years would have minor, if any, impact on the fire presuppression and suppression program.

7. Grazing Management

Potential off site impacts could occur from increased erosion, resulting in increased siltation. These impacts are minor and are reduced when proper rehabilitation is accomplished.

Impacts to livestock grazing would also include a loss of forage as a result of the trampling effect of seismograph crews, surface disturbance from blading access for crews, the construction of drilling pads, and the surface disturbance resulting from construction of permanent access to developed sites. Locally moderate negative impacts would occur from surface disturbing operations until reclamation has been accomplished.

A short-term loss of 286 AUMs would occur from an anticipated average of 1,000 active unreclaimed wells throughout the life of the plan. If the current 1,000 wells and the additional 300-525 well sites all remain active and unreclaimed, this would represent a temporary loss of 429 AUMs. Some of these AUMs would be lost permanently due to the construction of permanent roads. This is considered a minor impact to grazing management.

8. Wildlife and Fisheries

All stages of oil and gas operations directly affect wildlife. Habitat destruction by the construction of drilling pads and access roads is approximately 1,990 acres (995 wells with 2 acres of disturbance each) and could increase by an additional 600 to 1,050 acres (300-525 wells) during the life of the plan. This

impact is minor considering the area contains 591,000 acres of crucial and high value habitat for numerous species. Not all drilling is expected to occur within the crucial and high value habitat.

The major impact of past and present development has been the disturbance of wildlife populations by oil and gas drilling crews and the opening of new, previously undisturbed areas to the public by the creation of access roads. This impact is expected to continue. However, the BLM would have the option of closing new access roads that occur in crucial and high value habitat.

a. Big Game

Habitat loss by the construction of drilling pads and access roads would be minor. However, building roads and facilities into crucial big game habitat could increase human disturbances during crucial periods in the life cycle of the species involved (mule deer, antelope, white-tailed deer, and bighorn sheep). Crucial fawning areas and winter ranges might be avoided by game if these disturbances became intolerable. These impacts could be offset by seasonal restrictions as stated in the RMP. In addition roads into important habitat could be closed following drilling activities. The cumulative impacts from this disturbance would be minor.

b. Upland Game Birds

The breeding and nesting activities of sage grouse and sharp-tailed grouse could be disturbed during the exploration stage. Seismic activities and well drilling could disturb mating activities occurring on leks and could also disturb nesting activities causing abandonment. Nests could also be directly destroyed by exploration rigs and construction equipment. These disturbance factors are minimized by continuing the implementation of the RMP stipulations which restrict drilling within 500 feet of known leks and provide for special care in avoiding nesting areas between March 1 and June 30. Habitat losses based on past disturbances would be minor.

Increased access into previously undisturbed areas would increase harassment and mortality of these species. This, however, would only be during the average 3-5 day drilling period and roads could subsequently be closed for dry holes in important habitat. Overall cumulative impacts would be minor.

c. Waterfowl

Exploration and seismic activities would cause little direct mortality to waterfowl. However, these activities could disturb nesting activities, potentially causing abandonment. Accidental oil spills into aquatic habitats would trap or poison birds landing on the impacted bodies of water. These substances would also destroy food and cover used by waterfowl species. During development, nesting cover near aquatic habitats would be destroyed, causing a slight reduction in waterfowl populations. Reservoirs, seeps and other water sources serving as waterfowl habitat could be altered by construction. However, these impacts would be offset by the stipulations in the RMP which restrict drilling activities within 500 feet of reservoirs, lakes and ponds. Additional production would be lost if human activities discouraged nesting, which could happen during any stage of oil and gas operations. Overall, cumulative impacts would be minor.

d. Nongame

Small mammals would be killed by excavations, especially during drilling and development. Road construction and more vehicle travel through an area would result in more vehicle-small mammal collisions. Indirect mortality from habitat loss would be severe on particular sites, if the entire home ranges of small mammals were destroyed. Based on the small amount of acreage involved, impacts would be minor.

Bird nests and young birds would be destroyed during exploration, drilling and field development. Road kills of small birds and raptors would increase by the construction of new roads and increased vehicle traffic. Indirect mortality of nongame birds from habitat loss due to construction would occur, this loss would be in proportion to the importance and type of habitat destroyed. Persistent human activities near raptor nests could force these birds to abandon their nests and possibly their offspring. These impacts however, would be offset by the application of buffer zones as described in the "Rocky Mountain Front Raptor Guidelines" (see Appendix 2.2).

Although little is known about the herpetofauna and invertebrates present in the RMP area, human disturbance and habitat loss could be expected. Based on past oil and gas activities in the area, cumulative impacts to nongame species would be minor.

e. Threatened and Endangered Wildlife Species

Oil and gas operations could affect threatened and endangered species slightly. Although, there is no known ferret population in the RMP area, human disturbance from oil and gas activities could disturb potential habitat during the 3-5 day drilling period. Following that time, disturbance would be minor. The RMP stipulates no drilling could occur within 100 feet of black-tailed prairie dog towns, thereby minimizing loss of potential ferret habitat. The impacts to black-footed ferrets would be minor.

Impacts to the bald eagle and peregrine falcon would be minimal since these species' critical habitat is protected by the stipulations in the RMP. Disturbance from drilling and exploration to piping plovers could occur during the nesting period causing abandonment. The likelihood of drilling occurring in critical piping plover habitat, namely alkali wetlands and gravel shorelines of lakes and rivers, is slight. The buffer zone of 500 feet around reservoirs, lakes and ponds would also protect nesting habitat. Based on past drilling activities, impacts to T&E species would be minor.

f. Fisheries

Impacts to fisheries within the RMP area include accidental release of toxic substances into the water, accelerated erosion into fisheries habitat from construction of drilling sites and access roads, and the release of water from wells into fisheries habitat resulting in a change of water temperature to intolerable levels for some species of fish. All these could directly influence fish populations and the aquatic organisms they eat.

To date no significant negative impacts have occurred on any fishery within the RMP area from oil and gas activities. This is primarily due to the fact that no activity is allowed within 500 feet of a known fishery, as stated in the RMP. Therefore, future impacts to fisheries by oil activities would be minor.

9. Recreation

The main recreational opportunities on public lands in the RMP area are hunting, fishing, sightseeing, dispersed off-road vehicle (ORV) use, hiking, camping and boating along the Upper Missouri National Wild and Scenic River. Current recreational opportunities range from those associated with undeveloped primitive settings in extensive recreation management areas to those found in highly roaded and developed settings in special

recreation management areas. Recreational use is expected to increase in the planning area over the next 20 years as an increasingly urbanized population seeks wildland recreation, new types of recreational equipment, more leisure time, and the number of retired people increases.

The seismic exploration stage often results in cross country travel and high blading of seismograph roads. This might lead to more ORV use by hunters and other recreationists in designated open ORV areas, a beneficial impact to ORV enthusiasts, but a negative impact to those desiring pristine, undisturbed areas. These negative impacts could be minor in the Kevin-Sunburst and Cut Bank fields, moderate in the Sweet Grass Hills field and have the potential to be significant in the Leroy field and along the Upper Missouri National Wild and Scenic River.

The short-term impacts of dust from more traffic and noise from exploratory drilling would cause relatively minor disturbances. New roads would allow increased access by hunters and campers to previously remote areas. More use would cause indirect impacts, i.e. increased erosion, the greater possibility of destruction to cultural resources and increased hunting pressure. It should be noted that the effects could be of long duration.

Impacts on recreation from oil and gas activities, particularly in field development, revolve around the change in recreational opportunities from those found in a natural setting to those in a roaded industrialized setting such as may be found in oil fields with closely spaced wells, structures, access roads, pipelines, etc. These tend to be long-term impacts. The gas fields with shallower drilling depths and wider spacings would have much less impact. The impact on recreational quality would depend upon the capacity of these special recreation management areas to support the additional demand with the majority of the impacts being minor.

The major site specific impacts from oil and gas development and production would be increased recreational access, disturbance of primitive values and the possible increase in ORV use. Access roads provide corridors of use and sometimes improve hunting harvest. As can be imagined, roadless areas (whether designated wilderness study areas or not) would be affected by development. Although there are safety hazards in oil fields (noxious fumes, heavy equipment and potentially explosive chemicals), the impact would be insignificant. Intensively used areas also affect recreational uses like hunting, hiking, camping and sightseeing, which depend in some degree on solitude. These negative impacts would be most severe in special recreation management areas. Oil fields would cause more severe impacts than natural gas fields because of the need of the former for water pits, horsehead pumps, tank facilities and the closer spacing requirements.

Based on the location of existing fields in relation to areas of high recreational opportunities, the cumulative impacts of past, present and future oil and gas activity on recreation would be regarded as a minor, though long-term impact.

10. Visual/Aesthetics

The possibility of either beneficial or adverse visual impacts would depend entirely on the location of the 300-525 new wells and the 2-3 new gas fields that might be developed.

If there is a decision to lease portions of the UMNWSR during the life of this RMP, any exploration or field development activity within or visible from the river corridor would have a significant short or long-term negative impact, on river visitor expectations and on the natural integrity of the landscape.

The visual impacts from exploratory drilling would include the construction of roads and pads. As long as steep cuts are unnecessary, exploratory drilling would have moderate or minor impacts on the form and line of the landscape and vegetation. Steep cuts are difficult to reclaim and leave visible scars which could be a significant negative impact.

The most significant visual impacts from oil and gas operations would be from the development and production stages. The visual effects of development drilling would be significant immediately around the well. Within a known geologic structure where there is a lot of drilling, the landscape may become industrial in character, at least in the foreground. The use of visual resource management guidelines and landscape design can mitigate many of the adverse impacts. Although the field development stage would still be noticeable, it could be designed to be as unobtrusive as possible.

During the abandonment stage the landscape should be restored, the vegetation reseeded, roads may be put to bed and some production facilities removed.

Generally, the visual resources of the area would be improved after abandonment. In areas like the Missouri Breaks, however, reclamation might be a slow process. Many of the fields might not be abandoned for at least 20 years. There are currently 995 unreclaimed wells with an average disturbed area of 2 acres. The cumulative visual impact would be minor although it could be locally significant in the river corridor and the three WSAs.

11. Wilderness

There are three Wilderness Study Areas (WSAs) within the RMP area that are managed under BLMs Interim Management Policy (IMP): the Stafford WSA (4,800 acres), the Ervin Ridge WSA (10,200 acres) and the western portion of Cow Creek WSA (17,000 acres).

Wilderness values would be affected by oil and gas exploratory drilling and development on pre-FLPMA leases. Drilling rigs might cause significant negative impacts to the audible and visual values for the duration of the operations. Surface disturbances, an average of 2 acres per well, would also cause visual impacts, depending on the depth of the well and the topography of the area. These negative impacts could be mitigated by rehabilitation. The post-FLPMA leases have stipulations and mitigative requirements which would restrict or prohibit impacts which could adversely affect the wilderness values.

The Stafford WSA doesn't have any pre-FLPMA leases and only 260 acres in the post-FLPMA category. The Ervin Ridge WSA has 1,740 acres under pre-FLPMA leases (17%) and 3,738 acres (37%) under post-FLPMA. The Cow Creek WSA has no pre-FLPMA leases but does have 7,230 acres under post-FLPMA category.

Seismic exploration (the presence of aircraft, vehicle tracks, shot hole cuttings, explosions, and other sounds, dust plumes from explosives, litter) would create minor impacts. These operations, resulting in an apparent loss of the natural integrity of the area and a noticeable loss of solitude, would impact wilderness values negatively for anywhere from a few seconds (in the case of noise) to several years (in the case of trash and surface disturbances).

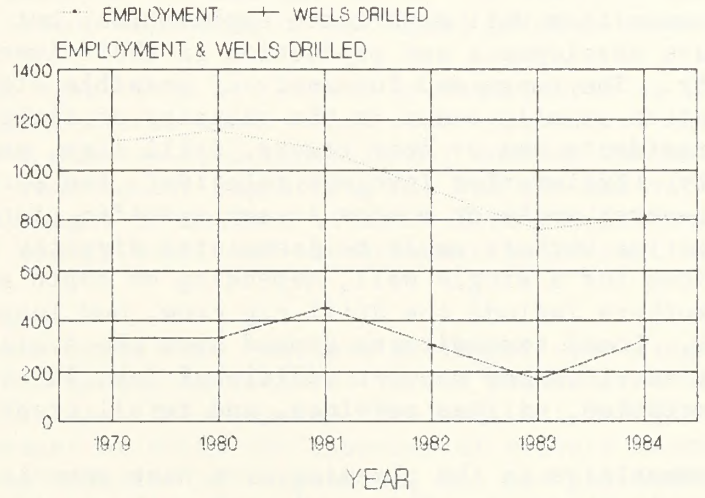
All motorized vehicles in the WSAs are restricted to designated roads, trails, and ways. No cross-country travel is permitted except for administrative use on a case by case basis. Heavy secondary use and maintenance operations along these existing routes would create a minor negative impact.

12. Economic and Social

Currently there is an established oil and gas industry in the planning area with producing oil and gas fields, support services, and one refinery in Cut Bank. All phases of oil and gas activities have occurred in the planning area (i.e., seismic exploration, exploratory drilling, field development and production, and oil refining).

In 1984, this industry provided 800 jobs in the oil and gas sector and an estimated 2,400 jobs in other sectors of the economy. Oil and gas production from federal leases in 1984 accounted for an estimated $72.3 million in business activity, $14.4 million in earnings and 770 jobs in the economy. Since oil and gas activity on federal mineral estate is expected to remain relatively constant, with one cycle of increased drilling activity, the economic importance of this industry should not change significantly during the next 10 to 15 years due to foreseeable development of federal minerals. Figure 11 shows the mining employment and oil/gas wells drilled in the Northern Montana Region from 1979 to 1984. Mining employment in this region is primarily in the oil and gas sector. Any increase in earnings and employment, due to oil and gas activities, would improve economic prospects. Most people and community leaders are currently trying to attract new basic industries into the area.

FIGURE 11: MINING EMPLOYMENT IN RELATION TO WELLS DRILLED IN THE NORTHERN REGION



SOURCE: REGIONAL ECONOMIC INFORMATION SYSTEM, BUREAU OF ECONOMIC ANALYSIS APRIL, 1988.

The economic impacts of future oil and gas activities on the local economy are difficult to assess because of the uncertainty of the extent or spatial distribution of potential oil and gas activities. Generally, the regional economic impacts are greater than the local impacts, due to the capital intensive nature of oil and gas activities (although other social effects are more noticeable locally). Expenditures for oil and gas equipment, supplies, and management skills are often made outside of the

local economy. In the case of seismic exploration and exploratory drilling, expensive equipment, managerial skills, and quite often the labor are brought in from outside the local area. When an exploratory well costing $10 million is drilled, this does not mean all of the $10 million is circulated through the local economy. Similarly if production occurs and the oil and gas is shipped to a destination outside the local area for refining, the sales from the products are not circulated through the local economy. Only when extensive drilling occurs, or a refinery or gas plant is built locally, will the local area experience significant economic gains.

The economic and social effects of oil and gas activities might include the displacement or diversification of other economic activities. For example earth-moving contractors may modify their operations to meet the growing demand for drill pad construction. This normally results in increased job opportunities, higher average incomes, and local population growth. Often, the social, emotional, or economic well-being of some people is enhanced while other persons are adversely affected.

Many communities will experience exploration, but relatively few will have development and production in their immediate vicinity. The range and intensity of possible effects from exploration usually occur in the vicinity of field operations. Local residents see or hear trucks, drill rigs, and construction activity. Exploration involves relatively few personnel who spend several weeks or months in any specific place. About 15 to 30 full-time workers would be associated directly with drilling operations for a single well, depending on depth and location. These workers include the drill rig crew, mud loggers and tool pushers. Local expenditures depend upon the availability of oil and gas services and support additional jobs in construction, transportation, oil/gas services, and retail trade.

Many communities in the planning area have experienced this activity in the past. This exploration phase, if moderate in scale and properly conducted, will normally produce minor economic and social impacts.

Exceptions to the usually low-key pattern of exploration often occur during short-term increases in drilling activity or following the discovery of a new gas field. Exploration activity will intensify as more companies send in field crews. The sounds of trucks, helicopters, and explosives become more evident, as will the increased demand for motels, bars, restaurants, service stations, medical services, and other facilities.

Following a discovery, drilling crews will remain in one area months to years to drill additional wells, and other personnel will be needed to construct and repair equipment. Development of a new gas field (e.g., 2 to 10 wells) could result in an estimated 80 workers associated with this stage of activity and another 50 jobs in construction, transportation, oil/gas services, and retail trade. At this stage, social impacts will become more evident.

Communities experience variations in the oil industry work force, expanded local employment opportunities, increased business activity, and greater demands for housing and public services. The influx of workers and their families will induce further economic and social changes in local institutions, traditions, life-styles, and community leadership patterns, especially in rural areas.

In most situations, if a new gas field is discovered near existing oil and gas fields and support services the economic and social impacts would be minor. The exception would be a major gas discovery. If a new gas field is discovered in an area without existing oil and gas fields the impacts could be moderate to significant depending on the level of development.

Petroleum operations are viewed by some people as inconsistent with other resource uses. They wish to preserve the scenic values and diverse opportunities for outdoor recreation. Frequent reasons for supporting oil and gas activities include the legal right to extract minerals from public lands, the national energy need, and the economic boost that new development provides.

Oil and gas operations can have an impact upon land use. These effects are generally centered in the communities nearest the oil and gas fields. By occupying the land, oil and gas companies could prevent or delay the disposal of private lands and subsequent transfer of ownership. Oil and gas operations can also affect land use by taking land out of forage or agricultural production; however the acreage affected is usually very small.

APPENDIX 2.2: OIL AND GAS STIPULATIONS

STANDARD OIL AND GAS STIPULATIONS

This appendix contains the Standard Oil and Gas Stipulations (MT 3109-1); the Raptor Stipulation for the Kevin Rim and the Sweet Grass Hills raptor habitat areas, including maps of the raptor habitat in the Kevin Rim and Sweet Grass Hills; the Rocky Mountain Front Raptor Guidelines; and Sample Conditions of Approval for Application for Permit to Drill.

This appendix details the stipulations which will be applied to all federal oil and gas leases in the planning area, regardless of surface ownership. These stipulations represent mitigation measures necessary to avoid or minimize adverse impacts to the human environment (40 CFR 1502.14(f) and 15002.16(h)). The stipulations prescribed for Federal mineral development in split estate situations apply only to the development of the Federal minerals. These stipulations do not dictate surface management. The mitigation measures present no restrictions on surface activities conducted for purposes other than those mineral development activities which are permitted, licensed, or otherwise approved by the Bureau of Land Management.

The raptor stipulation will be applied to new oil and gas leases within the raptor habitat identified on Maps A2.2a and A2.2b in this appendix.

Prior to approval of an APD on split estate, negotiations between the surface owner, operator, and BLM may be undertaken to incorporate specific needs of the surface owner. This may result in small adjustments to mitigative measures. Deviation from stipulations reducing the buffer zone or changing the timing restrictions may be allowed when a legitimate rationale supports the change.

If these mitigative measures are not effective in providing the desired degree of resource protection they may be revised at a future date. These stipulations may be waived or reduced if the resources are not present, the circumstances change or if the lessee can demonstrate that operations can be conducted without causing unacceptable impacts. Exceptions to stipulations in any particular year may be specifically approved in writing by the authorized officer. In all cases the stipulations (including any modification) will be the least restrictive measures necessary to avoid unacceptable adverse impacts.

UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
222 North 32nd Street
P.O. Box 36800
Billings, Montana 59107

_____
(Serial Number)

OIL AND GAS LEASE STIPULATIONS

ESTHETICS—To maintain esthetic values, all surface-disturbing activities, semipermanent and permanent facilities may require special design including location, painting and camouflage to blend with the natural surroundings and meet the intent of the visual quality objectives of the SMA.

EROSION CONTROL—Surface disturbing activities may be prohibited during muddy and/or wet soil periods. This limitation does not apply to operation and maintenance of producing wells using authorized roads.

CONTROLLED OR LIMITED SURFACE USE STIPULATION—This stipulation may be modified by special stipulations which are hereto attached or when specifically approved in writing by the Bureau of Land Management with concurrence of the SMA. Distances and/or time periods may be made less restrictive depending on the actual onground conditions. The prospective lessee should contact the SMA for more specific locations and information regarding the restrictive nature of this stipulation.

The lessee/operator is given notice that the lands within this lease may include special areas and that such areas may contain special values, may be needed for special purposes, or may require special attention to prevent damage to surface and/or other resources. Possible special areas are identified below. Any surface use or occupancy within such special areas will be strictly controlled, or **if absolutely necessary**, excluded. Use or occupancy will be restricted only when the Bureau of Land Management and/or the surface management agency demonstrates the restriction necessary for the protection of such special areas and existing or planned uses. Appropriate modifications to imposed restrictions will be made for the maintenance and operations of producing oil and gas wells.

After the SMA has been advised of specific proposed surface use or occupancy on the leased lands, and on request of the lessee/operator, the Agency will furnish further data on any special areas which may include:

100 feet from the edge of the rights-of-way from highways, designated county roads and appropriate federally-owned or controlled roads and recreation trails.

500 feet, or when necessary, within the 25-year flood plain from reservoirs, lakes, and ponds and intermittent, ephemeral or small perennial streams; 1,000 feet, or when necessary, within the 100-year flood plain from larger perennial streams, rivers, and domestic water supplies.

500 feet from grouse strutting grounds. Special care to avoid nesting areas associated with strutting grounds will be necessary during the period from March 1 to June 30. One-fourth mile from identified essential habitat of state and federal sensitive species. Crucial wildlife winter ranges during the period from December 1 to May 15, and in elk calving areas, during the period from May 1 to June 30.

300 feet from occupied buildings, developed recreational areas, undeveloped recreational areas receiving concentrated public use and sites eligible for or designated as National Register sites.

Seasonal road closures, roads for special uses, specified roads during heavy traffic periods and on areas having restrictive off-road vehicle designations.

On slopes over 30 percent, or 20 percent on extremely erodable or slumping soils.

(Date) (Signature)

NOTICE

CULTURAL AND PALEONTOLOGICAL RESOURCES—The Federal Surface Management Agency (SMA) is responsible for assuring that the leased lands are examined to determine if cultural resources are present and to specify mitigation measures. Prior to undertaking any surface-disturbing activities on the lands covered by this lease, the lessee or operator, unless notified to the contrary by the SMA, shall:

1. Contact the appropriate SMA to determine if a site specific cultural resource inventory is required. If an inventory is required, then;

2. Engage the services of a cultural resource specialist acceptable to the SMA to conduct a cultural resource inventory of the area of proposed surface disturbance. The operator may elect to inventory an area larger than the area of proposed disturbance to cover possible site relocation which may result from environmental or other considerations. An acceptable inventory report is to be submitted to the SMA for review and approval no later than that time when an otherwise complete application for approval of drilling or subsequent surface disturbing operation is submitted.

3. Implement mitigation measures required by the SMA. Mitigation may include the relocation of proposed lease-related activities or other protective measures such as testing salvage and recordation. Where impacts to cultural resources cannot be mitigated to the satisfaction of the SMA, surface occupancy on that area must be prohibited.

The lessee or operator shall immediately bring to the attention of the SMA any cultural or paleontological resources discovered as a result of approved operations under this lease, and not disturb such discoveries until directed to proceed by the SMA.

ENDANGERED OR THREATENED SPECIES—The SMA is responsible for assuring that the leased land is examined prior to undertaking any surface-disturbing activities to determine effects upon any plant or animal species, listed or proposed for listing as endangered or threatened, or their habitats. The findings of this examination may result in some restrictions to the operator's plans or even disallow use and occupancy that would be in violation of the Endangered Species Act of 1973 by detrimentally affecting endangered or threatened species or their habitats.

The lessee/operator may, unless notified by the authorized officer of the SMA that the examination is not necessary, conduct the examination on the leased lands at his discretion and cost. This examination must be done by or under the supervision of a qualified resources specialist approved by the SMA. An acceptable report must be provided to the SMA identifying the anticipated effects of a proposed action on endangered or threatened species or their habitats.

APPENDIX 2.2: STIPULATIONS

ROCKY MOUNTAIN FRONT RAPTOR GUIDELINES

The failure of adult raptors to return to nest, eggs or young after human interference of an unfamiliar nature, is both serious and unpredictable. Because of this unpredictability, precaution should always be taken around any occupied nest or potential nesting territory.

Following are general recommended nest buffer zones related to various human activities. These recommended zones are not inclusive; details in terrain, vegetation, type and duration and familiarity of disturbance, specific temperament of individual birds, phase of nesting cycle, etc., all enter into determining the actual needed buffer zone at a given nest site. Preclusion of human activity at a given nest territory should be tempered with as many variables as possible and on a site specific basis.

TABLE 1

Activity	Recommended buffer zones
Off-road vehicle use	1/4 mi - 1/2 mi
Camping	1/4 mi - 1/2 mi
Hiking	1/4 mi - 1/2 mi
Rock climbing	1/2 mi - 3/4 mi
Road construction	1/2 mi - 1 mi
Controlled burning	1 mi - 2 mi
Trail clearing	1/4 mi - 1/2 mi
Building/construction	1/2 mi - 3 mi
Mining/heavy equip or blasting	1 mi - 3 mi
Logging	1/2 mi - 1 mi
Aircraft flights (low altitude)	1/4 mi - 1 mi
Seismic	

Nesting chronology for most raptors can be divided into five phases. The following summarizes each phase, general sensitivity to disturbance and comments. This table should be used with table 1 to temper activity and zone buffers.

TABLE 2

Phase	Activity	Sensitivity To Disturbance	Comments
I	Nest building includes courtship behavior	Extremely sensitive, period most likely to desert.	1. Most critical time period from the standpoint of desertion.
II	Egg laying	" "	2. Human disturbance of even limited duration may cause desertion, not only of nest sites, but also of long established territories.
III	Incubation	" "	3. Nest site tenacity is weakest on new territories or when birds first establish their territories. 4. Flushed birds may puncture, crush or eject eggs from nest 5. Flushed birds leave eggs unattended. Eggs susceptible to cooling, loss of moisture, overheating and predation.
IV	Hatching and nesting rearing	Moderately Sensitive	1. As hatching approaches most birds become tenacious with clutches of eggs. 2. Generally uncommon to desert a nest after young have hatched.
V	Post Fledging	Moderately Sensitive	3. 1st half of nestling period, young most susceptible to elements. 4. Flushed birds may trample young or eject them from nest. 5. Unattended nestlings may chill or overheat, susceptible to predation.

(Table 2 Continued)

Phase	Activity	Sensitivity To Disturbance	Comments
			6. Nestlings may miss feedings. May affect overall health of young birds.
			7. Premature Fledging-Threat to young prematurely leaving nest due to disturbance.

TABLE 3

Approximate nesting dates for some raptors that occur in the West-Hi-Line Area

Species	Approximate Dates of Nesting Season
*Golden Eagle	Feb 1 - July 30
*Northern Goshawk	April 15 - August 15
*Ferruginous Hawk	April 1 - July 30
*Mevlin	April 15 - August 15
*Prairie Falcon	Feb 15 - July 30
*Northern Saw-whet Owl	March 1 - August 30
*Coopers Hawk	April 15 - August 15
*Burrowing Owl	March 15 - July 15
Sharp-Shinned Hawk	May 1 - August 1
Swainson's Hawk	April 15 - August 1
Northern Harrier	April 1 - July 1
Screech Owl	March 1 - June 1
Great-horned Owl	Jan 1 - August 1
Short-eared Owl	March 1 - August 1

*Species of special interest or concern

PEREGRINE FALCON
CURRENTLY OCCUPIED NESTING HABITAT

No currently occupied peregrine falcon nesting eyries have been located in the West HiLine area, however, a historical nest site is known for the Kevin Rim.

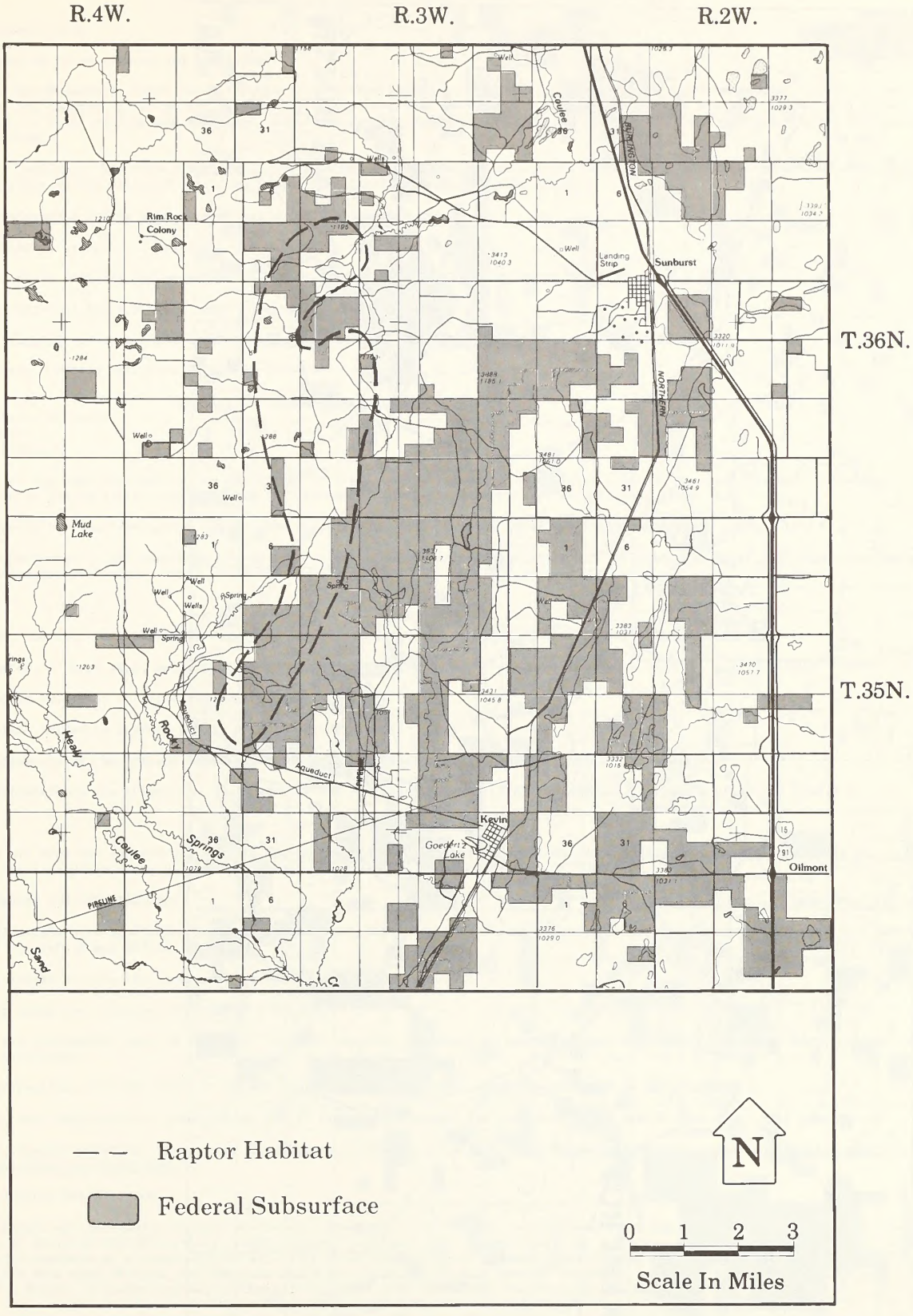
1. Should nesting peregrines be discovered, site specific nest management plans should be developed for each nesting territory. References used to develop these plans should be: the approved Recovery Plan and Guidance from the Montana Peregrine Falcon Working Group.

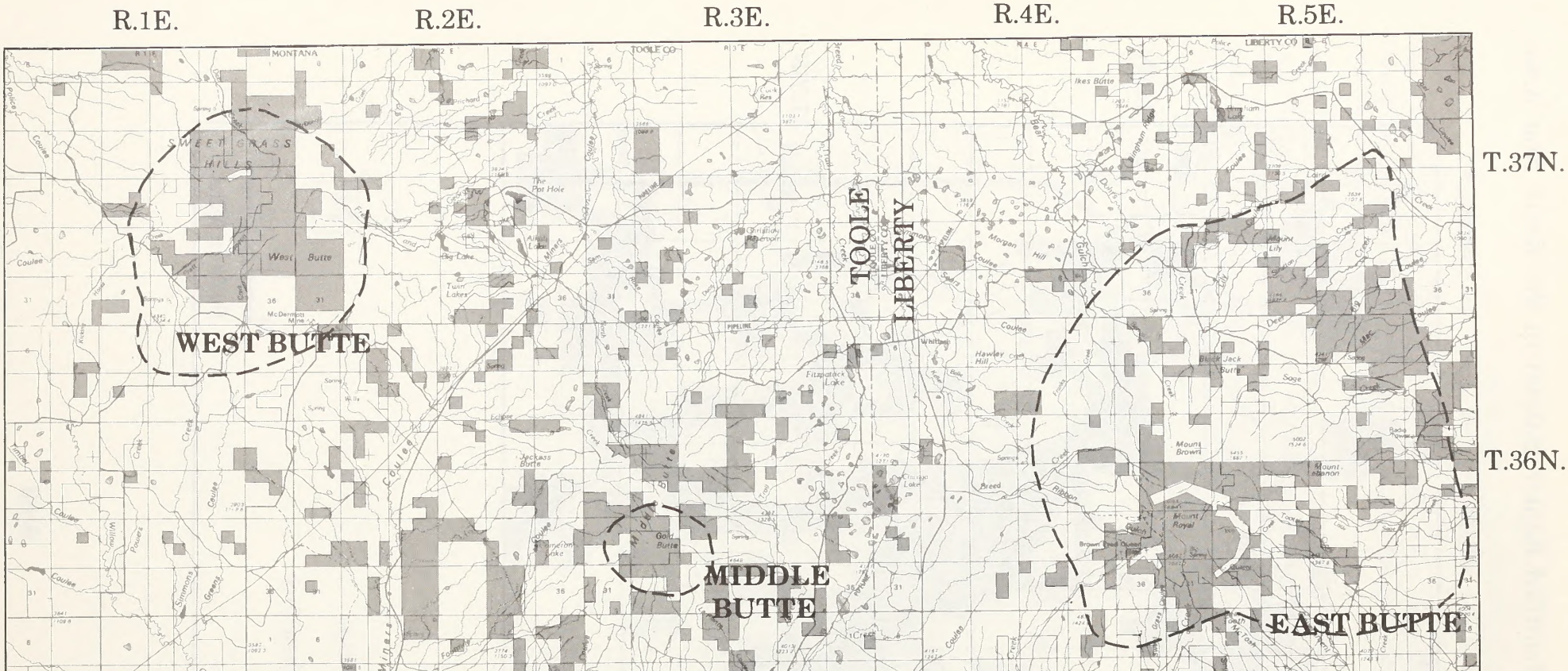
APPENDIX 2.2: STIPULATIONS
RAPTOR STIPULATION FOR THE KEVIN RIM AND SWEET GRASS HILLS

The following stipulation will be added to oil and gas leases within the identified raptor habitat in the Kevin Rim and Sweet Grass Hills areas (see Appenidx Figures 2.2A and 2.2B).

The Rocky Mountain Front Raptor Guidelines will be followed for all activities associated with this lease. At the time of APD approval, any portion or all of the site specific stipulations will be developed from the guidelines. Exceptions to stipulations in any particular year may be specifically approved in writing by the authorized officer.

Appendix Figure 2.2a Identified Raptor Habitat in the Kevin Rim Area.





Appendix T-Figure 2.2b Identified Raptor Habitat in the Sweet Grass Hills Area

APPENDIX 2.2: STIPULATIONS

SAMPLE CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

1. Site Specific Stipulations

   Location: Topsoil is to be removed and stockpiled.

   Rehabilitation: Non-Producer: After the pit contents have been hauled to a reservoir, the location is to be recontoured to the original shape of the terrain. The location is to be drill seeded with pure live seed mixture of 5 pounds per acre western wheatgrass and 3 pounds per acre green needlegrass, a total of 8 pounds per acre. Broadcast seeding requires doubling the above rates. Recommended seeding time is September 15 until soil freeze-up.

   Rehabilitation: Producer: The unused portion of the pad area will be recontoured to the original shape and seeded as described above. Production facilities on the well pad are to be painted a non-reflective earth tone color.

2. Notification Requirements (to be used in combination as field office determines).

   a. Notify this office verbally at least 8 hours before the well is spudded.

   b. Notify this office verbally not more than 48 hours after the well is spudded, or on the next regular work day.

   c. Notify this office at least 8 hours prior to running/cementing surface casing.

   d. For verbal plugging orders on drilling locations, notify this office at least 24 hours prior to plugging.

   BLM Representatives - Office Telephone No. (406) 538-7461

	Name	Home Telephone
Asst. District Mgr., Minerals		
Petroleum Engineer		
Environmental Scientist		

3. A complete copy of the approved Application for Permit to Drill (APD), including conditions, stipulations, and the H_2S contingency plan (if required) must be on the well site and available for reference during the construction and drilling phase.

4. This drilling permit is valid for either 1 year from the approval date or until lease expiration, whichever occurs first.

5. Dikes must be constructed to API standards around storage treatment facilities for liquids. The dike must be of sufficient size to contain the contents of the largest tank plus 1 day's production.

6. Dry Hole Marker

   Upon abandonment, the following marker is required. It must contain the same information as the well sign.

   __X__ A 4" diameter, 4' high pipe, welded to casing or set in cement.

   _____ A steel plate welded to surface casing at ground level.

   _____ A steel plate welded to surface casing 4' below ground level.

7. Additional requirements may be imposed if changes in operational and/or environmental conditions dictate.

   These special stipulations are subject to the Technical and Procedural Review (TPR) and appeals provisions of 43 CFR 3165.3.4.

Informational Notice

The following items are from the Federal Oil and gas regulations (43 CFR Part 3160) and from other public notices (Onshore Order No. 1, Notices to lessees). This is not a complete list, but is an abstract of some major requirements.

1. General Requirements (43 CFR 3162.2(a))

   The lessee shall comply with applicable laws and regulations; with the lease terms, Onshore Oil and Gas Orders; NTL's; and with other orders and instructions of the authorized officer.

2. Any substantial deviation from the terms of this APD require prior approval.

3. Well abandonment (3162.3-4, Onshore Order No. 1 - Sec. V)

   Prior approval for abandonment must be obtained. Initial approval for drilling operations may be verbal; subsequent notifications are to be on Form 3160-5 in triplicate.

4. Reports and Notifications (43 CFR 3162.4-1, 43 CFR 3162.4-3, Operating Form chart beginning of 43 CFR Part 3160).

   a. Form 3160-4, Well Completion or Recompletion Report (in duplicate) and two copies of logs, due 30 days after well completion.

   b. Form 3160-6, Monthly Report of Operations (one copy) due 10th day of second month following production month, beginning with month in which drilling operations are initiated.

   c. Production Startup Notification

      Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such Production has begun or resumed."

      The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on

which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such ss a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to $10,000 per violation for each day such violation continues, not to exceed a maximum or 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

5. Environmental Obligations (3162.5-1, Notices to Lessees 2B, 3A, 4A)

   a. With BLM approval, water produced from newly completed wells may be temporarily disposed of into unlined pits for up to 90 days. During this initial period, application for the permanent disposal method must be made in accordance with NTL-2B.

   b. Spills, accidents, fires, injuries, blowout and other undesirable events, as described in Notice to Lessee 3A, must be reported to this office within the time frames in NTL-3A.

   c. Gas may be vented or flared during emergencies, well evaluation, or initial production tests for a time period of up to 30 days or the production of 50 MMCF of gas, whichever occurs first. After this period, you must obtain approval from the authorized officer to flare or vent in accordance with NTL-4A.

6. Well Identification (43 CFR 3162.6)

   Each drilling, producing or abandoned well shall be identified with the operator's name, the lease serial number, the well number, and the surveyed description of the well (either footages or the quarter section, the section, township and range). The Indian allottee lessor's name may also be required. All markings must be legible, and in a conspicuous place.

7. Site Security on Federal and Indian oil and gas leases (43 CFR 3162-7-4)

   a. Oil storage facilities must be clearly identified with a sign, and tanks must be individually identified (43 CFR 3162.7-4(b)(6)).

   b. Site security plans must be completed within 30 days of production startup (43 CFR 3162.7-4(c)).

   c. Site facility diagrams must be filed within 30 days after facilities are installed or modified (43 CFR 3162.7-4(d)).

8. Confidentiality (3162.8)

   All submitted information not marked "CONFIDENTIAL INFORMATION" will be available for public inspection upon request. The exception is Indian lease information which is always considered confidential.

Thank you for your cooperation with the Lewistown District Office.

APPENDIX 2.3: ALLOTMENT LISTING

HAVRE RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Pblc Land	Acres Pblc Land	AUMs No of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Grzng System
5049	Phillips Co	C	160	27	110	C	Good	Non	S
5097	Liese/VanVoast	M	3215	750	152	C	Good	Prpsd	S
6001	Northwest	M	2617	528	105	C	Good	Non	S
6002	Pebble Crk	C	160	30	3	C	Good	Non	S
6004	Driftwood	C	440	79	30	C	Good	Non	S
6005	Davies Ranch	M	6048	1140	93	Y	Good	Prpsd	S
					340	C			
6006	West Unit	I	11023	2187	725	C	Fair	Exstg	RR
6007	Lyons Creek	M	1743	319	100	C	Gd/Fr	Prpsd	S
6008	Canada Line	M	1921	367	200	C	Good	Prpsd	S
6009	Meridian	M	781	163	90	C	Good	Prpsd	S
6010	East Fork	1	2050	633	3	C	Fr/Gd	Exstg	D/RR
6011	Bennett Coulee	M	3820	1034	150	Y	Good	Exstg	D/RR
					234	C			
					4	H			
6012	Border Unit	M	10116	2219	455	C	Gd/Fr	Exstg	RR
6013	Reservr Altmnt	M	1046	223	72	C	Good	Prpsd	S
6014	Silverbow	M	1520	322	100	C	Fr/Gd	Prpsd	S
6015	Upper 30 Mile	M	1181	197	125	C	Good	Exstg	DR
6016	Woody Coulee	C	200	40	27	C	Fair	Non	S
6017	Simons	M	798	153	37	C	Fr/Gd	Prpsd	S
6018	Cherry Ridge	1	8284	1668	340	C	Good	Exstg	DR
6020	Petrie Rnch	1	12959	2665	450	C	Fr/Gd	Exstg	DR
					100	Y			
					6	H			
6021	Customs	M	880	157	100	C	Good	Prpsd	S
6022	Uppr Woody Isl	1	2340	541	100	C	Good	Non	S
6023	Rifle Ranch	C	120	25	20	C	Good	Non	S
6025	Kiedrowski	C	40	6	6	C	Good	Non	S
6026	Borderline	C	595	185	50	C	Gd/Fr	Non	S
6027	Anderson Rnch	M	880	142	52	C	Good	Exstng	DR
6028	Elloam	C	1120	205	13	C	Fr/Gd	Non	S
6029	North Field	1	1600	316	68	C	Fair	Prpsd	S
6030	McClaren	M	1126	200	60	C	Good	Prpsd	S
6031	Bahr X 3	M	1191	229	40	C	Good	Prpsd	S
6032	Ola Creek	C	80	17	1	C	Good	Non	S
6033	Corral Creek	1	2380	463	150	C	Gd/Fr	Exstng	DR
					150	Y			
6034	Stevens	C	480	89	16	C	Good	Non	S
6035	U	M	1760	321	296	C	Good	Prpsd	S
6036	Only Forty	C	40	9	45	C	Good	Non	S
6037	Little Cherry	M	672	91	33	C	Good	Prpsd	S
6038	Magda North	C	441	95	50	C	Gd/Fr	Non	S
6039	Haugo	M	1436	301	189	C	Good	Prpsd	DR
6040	Diagonal	M	1242	314	1	C	Good	Prpsd	S
6041	Cherry Ridge	M	941	181	211	C	Good	Prpsd	S
6042	Red Top	C	120	22	2	C	Good	Non	S
6043	Mosquito	M	840	239	56	C	Gd/Fr	Prpsd	S
6044	Buckley Coulee	C	80	13	7	C	Fair	Non	S
6045	Turner	C	107	32	3	C	Good	Non	S
6046	Schellin Bros	1	1600	282	225	C	Fr/Gd	Prpsd	S
6047	Mud Lake	I	2360	672	240	C	Good	Exstg	DR
6048	Lodge Creek	M	1201	242	133	C	Fair	Prpsd	S
6049	Chinook Rsrvr	C	640	86	100	C	Good	Non	S
6050	South Field	M	919	168	58	C	Fair	Prpsd	S
6051	Tee Trail	M	900	154	46	C	Good	Prpsd	S
6052	No Chinook Cmn	M	1600	339	81	C	Fair	Exstng	DR
6053	Marker	M	480	102	43	C	Fair	Prpsd	S
6054	Skoyen	C	320	77	59	C	Fair	Non	S
6055	Lwr Chouteau Cl	I	1053	267	100	C	Fr/Gd	Exstng	DR
6056	Dry Fork	M	1640	333	80	C	Fair	Prpsd	S
6057	Holman	M	3910	997	300	C	Good	Prpsd	S
6058	Chouteau Cl	I	7280	1650	31	C	Good	Exstng	DR
6059	Boot Reservoir	C	480	103	35	C	Good	Non	S
6060	North	M	640	120	132	C	Good	Prpsd	S
6061	15 Mile Coulee	M	640	130	75	C	Gd/Fr	Non	S
6062	Tilleman Unit	1	1851	458	220	C	Gd/Fr	Prpsd	S
6063	Windbreak	M	1280	300	83	C	Good	Exstng	RR
6064	Miller	C	415	68	48	C	Good	Exstng	S
6065	Little Woody	C	400	77	100	C	Good	Non	S
6066	Hammer	I	1787	376	200	C	Fair	Prpsd	S
6067	FH	C	40	7	1	C	Good	Non	S
6068	Killam	C	480	118	30	C	Good	Non	S
6069	Second Bend	M	880	176	124	C	Fair	Prpsd	S
6070	Blaine County	C	859	192	100	C	Good	Non	S
6071	Hanson Flat	I	3360	751	184	C	Good	Exstng	RR
6072	Redrock Coulee	M	1120	252	102	C	Good	Prpsd	S
6074	Williams Bench	M	640	236	67	C	Good	Exstng	DR
6075	Reser	M	1720	352	77	C	Good	Exstng	DR

HAVRE RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Acres Pblc Land	AUMs Pblc Land	No of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Grzng System
6076	Pidgeon Lease	C	320	64	32	C	Good	Non	S
6077	North	C	480	111	80	C	Good	Non	S
6078	Lodge Creek	C	160	35	3	C	Good	Non	S
6079	East	C	197	39	80	C	Good	Non	S
6081	Siemens	C	40	5	80	C	Good	Non	S
6082	Rabbit Hills	C	240	39	7	C	Good	Non	S
6083	Battle Creek	M	1413	193	270	Y	Good	Prpsd	S
6084	Andy Reservoir	C	438	58	13	C	Fair	Non	S
6085	Coal Coulee	C	643	147	27	C	Fair	Non	S
6086	Salmo	M	1914	308	270	Y	Good	Prpsd	S
6087	No Coal Coulee	M	1611	343	100	C	Gd/Fr	Prpsd	S
6088	W Coal Coulee	M	690	151	80	C	Fair	Prpsd	S
6089	Pond Coulee	M	480	97	70	C	Good	Exstng	D
6090	Zurich Park	M	465	81	25	C	Gd/Fr	Prpsd	S
6091	Two Step Altmnt	M	661	136	243	C	Good	Prpsd	S
6092	Road Bend	M	1160	249	87	C	Good	Prpsd	S
6093	Half Loaf	C	320	80	45	C	Good	Non	S
6094	Triangle	M	1450	309	70	C	Good	Exstng	DR
6095	Pauly Pasture	M	2069	341	295	C	Good	Prpsd	S
6096	West Fork	C	880	177	155	C	Good	Non	S
6097	Wayne Creek	C	2298	486	55	C	Good	Non	S
6098	Buckshot	C	1560	332	236	C	Good	Non	S
6099	Riggin Common	M	5636	1413	293	C	Good	Exstng	DR/S
6101	Modic	I	956	220	119	C	Fair	Prpsd	S
6102	East Nelson	C	440	91	85	C	Gd/Fr	Non	S
6103	North Refugee	M	600	127	154	C	Gd/Fr	Prpsd	S
6104	Stoplight	C	40	9	1	C	Fair	Non	S
6105	Little Jewel	M	320	64	14	C	Good	Prpsd	S
6106	Second	C	160	34	11	C	Good	Non	S
6107	Liese/VanVoast	M	2625	597	205	C	Good	Prpsd	S
6108	County Line	C	20	4	8	C	Good	Non	S
6109	Miles Butte	C	601	115	10	C	Gd/Fr	Non	S
6110	S Slash	B	640	143	28	C	Fair	Non	S
6111	Zurich Bench	M	3239	674	241	C	Good	Exstng	RR
6115	Greenland	M	1330	179	130	C	Gd/Fr	Prpsd	S
6116	Rodeo	C	737	108	49	C	Good	Non	S
6117	Siphon	C	145	28	2	C	Fair	Non	S
6118	Colony	C	200	46	13	C	Good	Non	S
6119	Lwr Wayne Crk	M	4695	1144	190	C	Good	Prpsd	DR
6120	Willie	M	1276	250	220	C	Good	Prpsd	S
6121	Exclosure	M	400	81	----	C	Good	Prpsd	S
6122	Black Crk	M	1120	266	200	C	Good	Prpsd	S
6123	Finger Lakes	M	1683	375	30	C	Gd/Fr	Prpsd	S
6124	Harlem	C	512	71	12	C	Good	Non	S
6125	Matador	M	1400	279	81	C	Good	Prpsd	S
6127	Railroad	C	200	95	124	C	Good	Non	S
6129	Llano	M	6082	1126	269	C	Good	Prpsd	S
6130	Savoy Crk	C	440	79	350	C	Good	Non	S
6131	Drake Creek	M	1840	378	90	C	Good	Prpsd	S
					2	H			
6132	Milk Creek	M	2185	462	358	C	Good	Prpsd	S
6133	West Coburg	M	880	199	153	C	Good	Prpsd	S
6134	Coburg	M	1652	276	97	C	Good	Prpsd	S
6136	Junction	M	2587	658	222	C	Good	Prpsd	S
6137	Eureka	M	1441	317	215	C	Gd/Fr	Prpsd	S
6138	Hereford	C	40	12	2	C	Fr/Gd	Non	S
6139	Bowes Field	C	160	28	2	C	Gd/Fr	Non	S
6140	Pipeline	C	160	26	3	C	Fair	Non	S
6141	Miles Creek	C	120	48	8	C	Good	Non	S
6142	South Magda	C	40	10	2	C	Fair	Non	S
6143	Farm Road	C	80	14	140	C	Fr/Gd	Non	S
6144	County Road	C	342	82	82	C	Gd/Fr	Non	S
6146	North Fork	C	40	10	2	C	Good	Non	S
6147	Big Coulee	C	40	8	2	C	Fair	Non	S
6148	Mule Talk	C	50	9	2	C	Fair	Non	S
6150	Alkali Lake	M	1609	245	20	C	Gd/Fr	Prpsd	S
6152	Gap Creek	C	80	21	4	C	Good	Non	S
6153	Gap Creek	C	1345	162	14	C	Good	Non	S
6154	Birdtail Butte	C	561	134	17	C	Fair	Non	S
6155	McCann Butte	C	40	7	2	C	Good	Non	S
6157	Yrlng Pasture	C	381	46	185	C	Gd/Fr	Non	S
6159	Myrtle Butte	C	1257	267	60	C	Gd/Fr	Non	S
6160	North&McGuire	C	944	213	18	C	Fair	Non	S
6161	Halseth Field	C	480	92	88	C	Gd/Fr	Non	S
6163	Sawtooth Mtn	C	200	52	10	C	Fair	Non	S
6164	3-Mile Ridge	M	10321	1461	2	C	Good	Exstng	D
6165	TU Bench	M	2193	371	200	C	Good	Exstng	D
6166	Pioneer	M	600	60	60	C	Good	Non	S
6167	Tin Cup	I	560	64	167	C	Fr/Gd	Prpsd	S
6168	Al's Creek	I	3385	366	129	C	Fr/Gd	Prpsd	S
6169	Chimney Butte	I	7072	716	182	C	Fair	Prpsd	S

HAVRE RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Acres Pblc Land	AUMs Pblc Land	No of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Grzng System
6171	Little Suction	I	1383	169	167	C	Fair	Prpsd	S
6172	Timber Ridge	I	2845	1807	263	C	Good	Prpsd	S
6173	Sand Creek	M	4497	701	269	C	Good	Prpsd	S
6173	Sand Crk Secl5	M	1011	201	214	C	Good	Prpsd	S
6174	Benchmark	C	240	39	20	C	Fair	Non	S
6175	Warrick Jnct	C	610	97	42	C	Good	Non	S
6176	Sherard Field	I	2232	412	6	C	Good	Exstng	DR
6177	Black Fork	C	190	39	10	C	Fair	Non	S
6178	Lightning	C	360	32	4	C	Gd/Fr	Non	S
6179	No Sherard Fld	C	160	35	3	C	Good	Non	S
6180	Bullseye	C	40	5	1	C	Fr/Gd	Non	S
6181	Bullwhacker	M	40774	4563	13	C	Good	Exstng	RR
6182	Hay Coulee	I	12959	1414	350	C	Gd/F	Exstng	RR
6183	Birch Creek	M	3023	284	33	C	Fair	Non	S
6184	Greens Bench	M	11224	1099	255	C	Good	Exstng	RR
6185	Scattered Trct	C	611	92	8	C	Good	Non	S
6187	Frk/Black Coulee	C	1013	135	90Y	C	Fair	Non	S
6189	North Ranch	C	420	69	420	C	Fair	Non	S
6190	Oliver	C	241	36	6	C	Fr/Gd	Non	S
6191	North Altmnt	C	40	9	1	C	----	Non	S
6192	N FrkLionCoulee	I	3924	592	590	C	Good	Exstng	HILF
6193	Lion Coulee	I	3050	410	----	C	Good	Exstng	D
6194	Spencer Ridge	I	7250	587	98	C	Gd/Fr	Exstng	D
6195	Corner	C	120	21	2	C	Good	Non	S
6196	Hooper Spring	C	40	6	1	C	Good	Non	S
6197	Laporte Place	I	2115	465	160	C	Gd/Fr	Exstng	DR
6198	Chase Hill Cmmn	M	923	113	100	C	Good	Exstng	DRR
6199	Greens Coulee	M	1487	109	100	C	Good	Exstng	DRR
6200	Chip Creek	C	1600	387	97	C	Good	Non	S
6201	Halley	M	7250	537	45	C	Gd/Fr	Prpsd	S
6202	Cummings Bench	M	2089	198	160	C	Gd/Fr	Prpsd	S
6203	Golf Bench	M	3364	396	200	C	Gd/Fr	Exstng	DR
6204	Blk Coulee Cmmn	M	4642	372	465	C	Fr/Gd	Exstng	D
6205	Moravec Indvl	C	440	14	51	C	Good	Non	S
6206	UpprBlckCoulee	M	1036	104	49	C	Good	Prpsd	S
6207	Ragland Ridge	C	1085	25	2	C	Fr/Gd	Non	S
6208	Lost Ridge	I	6254	382	171	C	Good	Exstng	-
6209	Barnard Ridge	I	4807	432	102	C	Fair	Prpsd	S
					3	H			
6210	Maxwell	C	100	10	1	C	Good	Non	S
6211	Black Butte	I	8345	742	200	C	Fr/Gd	Prpsd	S
6212	Ervin Ridge	I	13918	915	383	C	Fr/Gd	Prpsd	S
6213	Rankin Land	C	97	16	60	C	Gd/Fr	Non	S
6214	Lil Bllwhckr	I	21642	1652	350	C	Gd/Fr	Exstng	RR
6215	Dark Butte	I	4537	362	33	C	Good	Prpsd	S
6216	Pablo Rapids	I	1653	115	29	C	Fair	Prpsd	S
6217	Sneath Common	I	5686	283	240	C	Fair	Prpsd	S
6218	Sneath Common	I	3095	344	78	C	Fair	Prpsd	S
6219	Hoge	C	560	187	47	C	Good	Non	S
6220	8 Mile Bench	C	1466	367	52	C	Good	Non	S
6221	Deadman Rapids	I	1605	110	37	C	Good	Prpsd	S
6222	Gallatin Rapids	I	6959	287	6	C	Fair	Prpsd	S
6223	Hsr Hm Place	C	55	7	2	C	Fair	Non	S
6224	Upr Dphn Rapid	I	2400	84	54	C	Good	Prpsd	S
6225	Dauphine Rapids	M	210	12	28	C	Good	Prpsd	S
6226	Sharples Place	C	320	60	69	C	Good	Non	S
6227	Chouteau Coulee	I	5120	1013	375	C	Fair	Exstng	DR
6228	Fort	C	120	25	25	C	Good	Prpsd	S
6229	Guide	C	480	130	52	C	Good	Prpsd	S
6230	Hrs Crrl Coulee	M	1915	369	180	C	Good	Exstng	RR
6231	15 Mile	M	1640	325	190	C	Good	Exstng	RR
6232	30 Mile	M	920	176	190	C	Good	Exstng	RR
6233	Airstrip	M	2629	495	185	C	Gd/Fr	Prpsd	S
6234	Quarter	C	199	48	33	C	Good	Non	S
6235	MBEast Pasture	I	1709	321	137	C	Gd/Fr	Prpsd	S
6236	South	M	1584	322	70	C	Good	Prpsd	S
6237	Hldng Pstr CSGD	C	160	35	5	C	Good	Non	S
6238	Highway	C	310	65	45	C	Good	Non	S
6239	Forgey Creek	I	3840	555	9	C	Good	Exstng	DR
6240	Moses Indvl	C	100	24	53	C	Good	Non	S
6241	Pueblo	C	80	9	2	C	Good	Non	S
6242	Waylee	C	80	9	5	S	Fr/Gd	Non	S
6243	Big Bend	M	590	180	180	C	Fair	Exstng	S
6245	Stirrup	C	200	40	80	C	Good	Non	S
6246	Wadish Base	C	40	8	4	C	Good	Non	S
6247	West Wildhorse	C	114	32	8	C	Good	Non	S
6248	Grave	C	43	6	1	C	Good	Non	S
6249	Pwll Nrth Unit	I	1923	295	106	C	Gd/Fr	/Prpsd	S
6250	Milk Rvr	C	167	35	5	C	Fair	Non	S
6251	East Unit	I	5256	1121	415	C	Good	Exstng	RR
					2	H			

HAVRE RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Acres Pblc Land	AUMs Pblc Land	No of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Grzng System
6253	Fifty-Fifty	C	80	16	5	C	Good	Non	S
6254	Lost Bird	C	40	6	1	C	Good	Non	S
6255	Graber Unit	M	624	113		C	Gd/Fr	Prpsd	S
6256	Silver Lake	C	80	15	1	C	Good	Non	S
6257	North Zurich	M	1576	340	130	C	Gd/Fr	Prpsd	S
6258	Lateral	C	160	16	2	C	Good	Non	S
6260	Rankin Range	M	776	177	135	C	Gd/Fr	Prpsd	S
6261	Nvevo	C	320	62	131	C	Good	Non	S
6263	Reservoir Coulee	M	1765	397	68	C	Good	Existing	DR
6264	Mitchell	M	920	385	128	C	Good	Existing	DR
6265	Bench	C	40	7	1	C	Good	Non	S
6266	Section & Half	M	480	81	64	C	Good	Existing	DR
6267	Loma Ranch	C	101	20	2	C	Good	Non	S
6268	Thibadeau	M	920	222	37	C	Fair	Existing	DR
6269	N. Timber Ridge	M	1125	145	12	C	Good	Prpsd	S
6292	3-Mile	C	62	17	1	C	Good	Non	S
6301	North Snake	C	255	45	11	C	Good	Non	S
6302	Snake Butte	M	862	145	29	C	Good	Prpsd	S
6303	River Run	C	39	9	3	C	Good	Non	S
6304	Snake Btte Est	M	1117	194	39	C	Good	Prpsd	S
6341	Lil Bxeldr Cr	C	8	2	1	C	Fair	Non	S
6350	South Vimy	I	920	95	19	C	Fair	Prpsd	S
6406	Kaun	C	40	14	2	C	Good	Non	S
6407	Bootlegger	C	120	35	5	C	Good	Non	S
6408	Pinto	C	120	37	3	C	Good	Non	S
6410	Warrick	C	40	11	2	C	Good	Non	S
6411	PreferenceLnds	C	320	60	4	C	Good	Non	S
6412	Buckin	M	960	137	85	C	Good	Prpsd	S
6413	Little Birch	C	114	13	1	C	Gd/Fr	Non	S
6414	Triangle PU	M	280	51	220	C	Good	Prpsd	S
6415	Dogtown	I	1171	91	100	C	Fr/Gd	Exstng	RR
6416	Pigtail Coulee	I	1248	132	100	C	Good	Exstng	RR
6417	Trafalger	C	160	23	8	C	Fair	Non	S
6418	Blanchard	C	435	81	20	C	Fair	Non	S
6419	Kelly	C	200	55	10	C	Fair	Non	S
6420	Clinard Coulee	C	280	70	10	C	Fr/Gd	Non	S
6421	Henry	C	120	34	5	C	Good	Non	S
6422	N Hanging 5	C	329	100	7	C	Fair	Non	S
6424	Blazek	C	336	90	15	C	Gd/Fr	Non	S
6425	Piedras	C	1002	54	12	C	Good	Non	S
6426	Grouse	C	186	41	3	C	Fair	Non	S
6428	Osterman Henry	C	200	42	5	C	Good	Non	S
6429	Puma	C	156	53	7	C	Good	Non	S
6430	Braun	C	254	29	4	C	Good	Non	S
6431	Cougar	C	290	107	14	C	Good	Non	S
6432	Arroyo	C	553	139	23	C	Fair	Non	S
6433	Valkyrie	C	80	5	1	H	Fair	Non	S
6434	Cabin	I	1874	429	50	C	Fair	Prpsd	S
6435	Kng Cle St Tr	C	629	66	6	C	Good	Non	S
6436	Lasso	C	40	8	1	C	Good	Non	S
6437	Beaudette	C	40	10	1	C	Fair	Non	S
6438	Hackamore	C	319	54	7	C	Fair	Non	S
6439	Homestead Coule	I	1527	408	90	C	Fair	Prpsd	S
6440	Latigo	C	400	66	11	C	Fair	Non	S
6441	Stevens	C	347	58	17	C	Good	Non	S
6442	Marias Rvr 1	C	682	182	25	C	Fair	Prpsd	S
6443	Klondike	M	1200	200	40	C	Good	Prpsd	S
6444	Sheep Coulee	M	1771	591	118	C	Good	Prpsd	S
6445	Marias Breaks	C	178	40	6	C	Fair	Non	S
6446	Nome	I	1223	185	40	C	Fair	Prpsd	S
6447	Est Lnsme Lake*	C	320	80	6	C	Fair	Non	S
6448	Christofferson*	M	5096	1635	225	C	Good	Prpsd	S
6450	Ihmsen Well*	M	1669	668	100	C	Fair	Prpsd	S
6451	Lnsme Pair Farm*	M	1982	368	76	C	Fair	Prpsd	S
6452	Grass Seed**	M	1080	300	100	C	Fair	Prpsd	S
6453	Hardware*	M	438	176	43	C	Fair	Prpsd	S
6454	Two Bit*	C	40	10	1	C	Good	Non	S
6455	Haystack*	M	2643	1057	151	C	Good	Prosd	S
6456	Reservation	C	244	34	3	C	Good	Non	S
6457	Edwards Lease	C	300	43	3	C	Good	Non	S
6458	Bear Paw	C	25	4	1	C	Good	Non	S
6459	Bullhook	C	40	8	1	C	Fair	Non	S
6460	Kremlin	C	80	27	7	C	Fair	Non	S
6461	Fresno	C	120	16	2	C	Good	Non	S
6462	Long Beach	C	78	25	6	C	Fair	Non	S
6464	Creedman Coulee	C	80	16	3	C	Fair	Non	S
6465	Signal	C	174	35	6	C	Fair	Non	S
6466	Haugen	C	40	12	1	C	Fair	Non	S
6467	Hot Iron	C	40	7	2	C	Fair	Non	S
6468	Lobo	C	720	180	45	C	Fair	Non	S
6470	Nagelhus Lease	M	1600	163	23	C	Fair	Prpsd	S
6471	Wildhorse Lake	M	8794	691	173	C	Fair	Prpsd	S

HAVRE RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Acres Pblc Land	AUMs Pblc Land	No of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Grzng System
6472	Wildhorse	M	960	108	27	C	Fair	Prpsd	S
6475	Vimy Point	C	160	22	3	C	Fair	Non	S
6476	Chauvet	C	120	22	7	C	Fr/Gd	Non	S
6477	Dietz	C	286	30	3	C	Good	Non	S
6478	Teton	C	560	77	15	C	Fair	Non	S
6479	Shamrock	C	40	14	3	C	Fair	Non	S
6480	Jacobsen	C	40	14	25	C	Good	Non	S
6481	Jurenka	C	130	7	1	C	Good	Non	S
6482	Badger	C	400	46	15	C	Good	Non	S
6483	Tunis	C	40	12	2	C	Good	Non	S
6484	Sunset	C	600	16	13	C	Fair	Non	S
6485	Marias River 2	C	240	38	6	C	Gd/Fr	Non	S
6486	Lazy K6	C	181	40	8	C	Good	Non	S
6487	Melby	C	120	32	8	C	Unsu	Non	S
6488	W Lonesome Lk	C	120	48	32	C	Fair	Non	S
6490	Fork Coulee	I	1096	193	27	C	Fair	Non	S
6491	Pine Tree	C	80	18	3	C	Good	Non	S
6494	Red Wing	C	18	3	1	C	Good	Non	S
6524	Anchor's Isl	C	40	9	1	C	Good	Non	S
6541	Roadside	C	40	6	1	C	Good	Non	S
TOTALS									
	TOTAL		525733	86092					

*All BR Acres
**40 Acres BLM and 1040 Acres BR

HAVRE RESOURCE AREA - UNALLOCATED ALLOTMENTS

Nmbr	Altmnt Name	Mgt Cat	Acres Pblc Land	AUMs Pblc Land	No. of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Grzng System
6331	Unallocated	C	118	-0-	-0-	---	--	Non	S
6332	"	C	37	-0-	-0-	---	--	"	"
6333	"	C	26	-0-	-0-	---	--	"	"
6334	"	C	40	-0-	-0-	---	--	"	"
6335	"	C	40	-0-	-0-	---	--	"	"
6336	"	C	40	-0-	-0-	---	--	"	"
6337	"	C	25	-0-	-0-	---	--	"	"
6338	"	C	35	-0-	-0-	---	--	"	"
6339	"	C	11	-0-	-0-	---	--	"	"
6340	"	C	1	-0-	-0-	---	--	"	"
6341	"	C	4	-0-	-0-	---	--	"	"
6342	"	C	40	-0-	-0-	---	--	"	"
6343	"	C	40	-0-	-0-	---	--	"	"
6344	"	C	40	-0-	-0-	---	--	"	"
6345	"	C	40	-0-	-0-	---	--	"	"
6501	"	C	80	22	-0-	---	-G	"	"
6503	"	C	40	12	-0-	---	-G	"	"
6505	"	C	33	10	-0-	---	-G	"	"
6507	"	C	40	4	-0-	---	-G	"	"
6509	"	C	80	12	-0-	---	-F	"	"
6512	"	C	40	5	-0-	---	-F	"	"
6513	"	C	40	9	-0-	---	-F	"	"
6514	"	C	40	6	-0-	---	-F	"	"
6515	Unallocated	C	29	1	-0-	---	-F	Non	S
6516	"	C	40	7	-0-	---	-G	"	"
6518	"	C	40	12	-0-	---	-G	"	"
6519	"	C	15	9	-0-	---	-G	"	"
6520	"	C	80	7	-0-	---	-F	"	"
6521	"	C	40	7	-0-	---	-F	"	"
6522	"	C	45	19	-0-	---	-G	"	"
6524	"	C	40	9	-0-	---	-F	"	"
6527	"	C	80	18	-0-	---	-G	"	"
6528	"	C	40	6	-0-	---	-F	"	"
6529	"	C	40	8	-0-	---	-F	"	"
6530	"	C	40	7	-0-	---	-G	"	"
6531	"	C	40	8	-0-	---	-F	"	"
6532	"	C	42	11	-0-	---	-G	"	"
6533	"	C	40	6	-0-	---	-F	"	"
6534	"	C	71	6	-0-	---	-F	"	"
6535	"	C	80	7	-0-	---	-F	"	"
6536	"	C	40	10	-0-	---	-G	"	"
6540	"	C	59	15	-0-	---	-G	"	"
6542	"	C	40	11	-0-	---	-F	"	"
6548	"	C	40	6	-0-	---	-F	"	"
6554	"	C	80	19	-0-	---	-F	"	"
6555	"	C	40	12	-0-	---	-F	"	"
6557	Unallocated	C	40	9	-0-	---	-F	Non	S
6558	"	C	40	10	-0-	---	-F	"	"
6559	"	C	40	10	-0-	---	-F	"	"
6564	"	C	40	7	-0-	---	-F	"	"
6567	"	C	40	4	-0-	---	-G	"	"
6568	"	C	40	8	-0-	---	-G	"	"
6577	"	C	10	3	-0-	---	-F	"	"
6581	"	C	80	10	-0-	---	-F	"	"
6568	"	C	40	5	-0-	---	-F	"	"
	TOTAL		2401	357					

GREAT FALLS RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Acres Pblc Land	AUMs Pblc Land	No. of Lvstk	Lvstk Class	Vegt Cond	AMP Status
6340	India	C	607	203	-	-	Fair	
6348	Home Place	C	216	33		C	Fair	Prpsd
6349	Falcon	C	1220	193		C	Fair	Prpsd
6350	B & D	C	1450	229		C	Fair	Prpsd
6351	Halvorson	C	40	14	2	C	Good	
6352	Dahlen	C	160	36	4	C	Fair	
6353	Kevin Rim	C	1382	220	5	C	Fair	Prpsd
6354	India	C	640	171	14	C	Fair	
6355	East	C	1661	263	75	C	Fair	Prpsd
6356	India	C	400	116	10	C		
6357		C	80	15	3	C	Pr/F	
6358	Wilma	M	2874	358	30	C		
6359	Rimrock	C	404	125	10	C	Good	
6360	India	C	720	150	12	C		
6361	Saltbush	C	320	53	4	C	Fair	
6362	Virden Lake	C	1409	89	30	C		
6363	Open Flat	C	560	187	31	C	Fair	
6364	Shelby	C	905	36	7	C		
6367	Big Damp	C	833	137	19	C	Fair	
6368	India	C	156	28	4	C	Fair	
6369	Roun	C	181	37	11	C	Fair	
6370	Red Deer	C	458	107	6	C	Good	
6371	India	C	247	75	6	C	Good	
6372	Hurley	C	40	13	18	S	Fair	
6373	Oilmont	C	435	145	1	C	Fr/Gd	
6374	Sandon	M	480	120	20	C	Gd/Fr	Existing
6375	Psalmist	C	80	8	1	C	Fair	
6376	Jimmy	C	120	40	10	C	Good	
6377	Henry	C	40	5	10	S	Fair	
6378	Upper Marias	C	2689	245	30	C		
6379	India	C	320	80	6	H	Fair	
6380	Keil	C	186	62	21	C	Fair	
6381	M and M	C	197	44	6	C	Fair	
6383	Dry Fork	C	32	7	1	C	Fair	
6384	Myron	C	62	10	2	C	Fair	
6385	India	C	240	37	3	C	Fair	
6386	Mack	C	360	25	8	C	Fair	
6387	India	C	203	68	6	C	Fair	
6388	India	M	120	37	6	C	Exclt	
6389	West Butte	M	1870	312	26	C		
6390	Mickey	C	200	37	12	C	Exclt	
6391	Fey Lease	C	40	7	1	C	Exclt	
6392	Antelope	C	322	100	8	C	Fair	
6393	Arrowhead	C	80	15	5	C		
6394	Blackfoot	M	327	32	8	C	Exclt	
6395	Mt. Royal	I	2177	192	42	C	Fair	Prpsd
6396	Marias Bridge	C	1619	324	165	C		
6397	Oswood	M	657	36	5	C	Exclt	
6398	Bald Eagle	M	1131	82	15	C		
6399	Buffalo	M	3763	1255	153	C	Fair	Prpsd
6402	Link	C	237	34	4	C	Fair	
6403	Denson Ranch	C	680	66	17	C	Fair	
6404	India	C	40	10	3	C	Fair	
6405	North Star	C	443	70	30	C	Fair	
6406	West Virden		40	12	1	C	Good	
6463	Liberty		4	1	13	C		
6473	Sunburst	C	440	10	3	C	Fair	
6474	Good	C	80	27	5	C	Fair	
6489	Gold Eagle	M	210	14	3	C	Fair	
6492	India	C	80	18	3	C	Fr/Gd	
6493	Hill		595	120	32	C		
6495	Fowler	C	77	12	2	C		
6496	Cut Bank	C	1069	1	1	C		
6569	Outlook School	C	200	15	3	C		
6570	McPhillips	C	40	8	1	C		
	TOTAL		143768	6631				

ALLOTMENTS ALONG UMNWSR JUDITH RA

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Acres Pblc Land	AUMs Pblc Land	No of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Grzng System
0010	Blind Canyon	I	2485	294	101	C	Exl/Gd/ Fair	E	DR
0025	Demars	M	4640	351	89	C	Exl/Gd	E	DR
0031	Woodhawk	M	27359	3192	744	Y	Exl/Gd	E	DR
					150	C	Fair		
					39	H			
0045	Mattuscheck	M	6782	734	238	C	Exl/Gd	E	RR
					5	H	Fair		
0046	River	M	6627	534	150	C	Exl/Gd	E	DR
0066	Iron City Island	M	768	92	60	C	Gd/Fr	E	DR
0067	PN Ranch	M	14846	1931	1470	C	Exl/Gd	E	DR
5122					275	X			
5123									
5126									
5127									
0081	Reed Coulee	I	2850	688	115	C	Gd/Fr	E	DR
0081	Stultz	M	4179	500	123	C	Gd/Fr	E	RR
9649	ABN Ranch	C	236.93	66	8	C	Gd/Fr	None	S
9662	Henderson	C	800	97	8	C	Gd/Fr	None	X
9681	Clark	C	160	23	2	C	Gd/Fr	None	S
9687	Dammel	C	905.37	137	60	C	Gd/Fr	None	S
9714	Stultz	C	1173.97	172	14	C	Gd/Fr	None	Y
9729	Hicks	C	819.86	104	19	C	Gd/Fr	None	S
9779	Quenell	C	625	94	11	C	Gd/Fr	None	Y
9785	Last Chance Bench	C	1234	139	12	C	Fair	P	Yr Rd
9826	Flat Creek	M	1120	160	64	C	Fair	E	S
9838	Labarge Rocks	M	2568.53	329	130	C	Gd/Fr	P	S
9658									
9839	Sheepshed Coulee	M	4147	364	190	C	Gd/Fr	E	DR
	TOTAL		84327	10001					

ALLOTMENTS ALONG UMNWSR PHILLIPS RA

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Acres Pblc Land	AUMs Pblc Land	No of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Grzng System
5609	Cabin Creek	I	14510	1156	418 58	Y C	Good	Extng	D/RR
5610	Antelope Creek	I	43754	4475	535	C	Gd/Fr	Prpsd	S
	TOTALS		58264	5631					

APPENDIX 2.6: MITIGATION MEASURES FOR VEGETATION (A), WILDLIFE (B), AND CULTURAL RESOURCES (C)

APPENDIX 2.6A: VEGETATION MITIGATION MEASURES

All rights-of-way, leases, permits or surface disturbing activities will have stipulations for riparian protection and a rehabilitation plan.

Topsoil will be stockpiled when a surface disturbing action begins and will be replaced at the completion of the project.

Tractor logging will be limited to slopes with average gradient of less than 40%.

Clearcuts will be limited to slopes with an average of gradient of less than 30%.

Clearcut blocks will be less than 10 acres.

If available, a minimum of 3 snags/acre, plus replacement snags will be left for wildlife use on all sale and thinning areas.

All road construction will be laid out by BLM personnel in accordance with MSO 5424-4 specifications.

Streamside "green" strips would be left along all perennial streams. Minimum strip width would be the average height of the overstory. The strip width will be determined by an on site evaluation during the activity development phase.

All wildfires of 100 acres or more will be reviewed by the district rehabilitation team to determine rehabilitation needs.

Within the UMNWSR Corridor the following restrictions will apply:

Fire fighting equipment is restricted to existing roads: no red fire retardant will be used in the White Rocks section of the UMNWSR Corridor.

APPENDIX 2.6B: WILDLIFE MITIGATION MEASURES

The following standard stipulations to mitigate impacts to wildlife will be applied to surface disturbing activities in the Kevin Rim, Sweet Grass Hills and in important wildlife winter range areas. These stipulations will be appended to other areas if monitoring and inventories indicates a need. These stipulations will be applied at the activity level phase after an on site evaluation indicates the presence of the specific resource.

No surface occupancy for leasable mineral exploration and other surface disturbing activities will be allowed on mule deer and antelope winter and fawning ranges from December 1 - May 15 and May 1 - June 30.

No surface occupancy for leasable mineral exploration and other surface disturbing activities allowed on important elk habitats (Sweet Grass Hills) during the following seasonal use periods (locatable mineral activity will be mitigated to the extent possible to prevent unnecessary and undue degradation to these resource values:

Winter ranges December 1 - May 15
Calving areas May 1 - June 30

Time restrictions on surface disturbing activities may be applied on nesting areas and strutting grounds of sage and sharp-tailed grouse from March 1 to June 30.

Surface use may be controlled or excluded with a ¼ mile zone of identified essential habitat of federal and state listed threatened, endangered and sensitive species; at the present time this stipulation will primarily be applied to raptor species.

Currently there are no known occupied peregrine falcon aeries in the area; however, historical and potential nest sites are known for the Kevin Rim, Marias and Missouri River Corridors and the West Butte of the Sweet Grass Hills. In the event a peregrine falcon is found or introduced the BLM will adhere to the approved recovery plan and guidance from the Montana Peregrine Falcon Working Group.

APPENDIX 2.6C: CULTURAL MITIGATION MEASURES

All surface disturbing actions could require a cultural inventory prior to approval of the action. The guidelines from the Northern Glaciated Plains Statistical Survey will apply.

Impacts to significant cultural resources will be avoided where possible and feasible. Where impacts cannot be avoided, impacts to cultural resources will be mitigated when BLM determines it necessary by employing appropriate procedures taken from the Secretary of Interior's standards for historic preservation projects.

National Register of Historic Sites and other significant sites within the UMNWSR Corridor in immediate danger of loss due to natural and/or human disturbance will be monitored, avoided and/or excavated.

Impacts to Native American religious sites will be avoided or mitigated where possible or necessary.

If cultural resources are encountered during surface disturbing activities construction operations will cease until BLM can evaluate the find and salvage if necessary.

All cultural surveys and excavations done on public lands will be performed by holders of valid archaeological permits.

APPENDIX 3.1: LEGAL DESCRIPTION OF THE KEVIN RIM AREA

T. 35 N., R. 3 W., PMM
Section 3: Lots 3, 4, SW¼NW¼, W½, SW¼
Section 4: Lots 1-4, S½N½, S½
5: 1, 2, S½NE¼, SE¼
6: SE¼
7: Lots 3, 4, E½SW¼, SE¼
8: NW¼NE¼, S½, NE¼, W½, W½SE¼, SE¼SE¼
17: All
18: Lots 3, 4, E½, E½W½
19: Lots 1, 2 NW¼, NE¼, S½NE¼, E/2NW¼
20: NE¼NE¼, NE¼NW¼

T. 36 N., R. 3 W., PMM.
Section 4: Lots 3, 4
17: S½NE¼, SE¼NW¼, E½SW¼, N½SE¼, SW¼, SE¼
20: E½NW¼
22: SW¼SE¼
27: N½NW¼, E½SW¼, SW¼SW¼
28: N½NE¼, SW¼, NW¼, W½SW¼, SE¼SE¼

APPENDIX 3.2: LEGAL DESCRIPTION OF THE SWEET GRASS HILLS

West Butte of the Sweet Grass Hills.
T. 37 N., R 1 E., PMM.
Section 13: Lots 4, 5 SE¼SW¼, SW¼SE¼
14: Lots 1-3, W½NE¼, E½SW¼, SW¼SW¼
15: SE¼SE¼
24: Lots 1-4, W½E½, NE¼NW¼, E½SW¼, SW¼SW¼
25: Lots 1-3, 5,6,8-10, SW¼NE¼, S½NW¼, NE¼SW¼, NW¼SE¼
26: SE¼NE¼

T. 37 N., R 2 E., PMM.
Section 19: Lot 4
20: NW¼NE¼, NE¼NW¼
30: Lot 1-4, S½NE¼, SE¼NW¼,E½SW¼, SE¼
31: Lots 1-3, NE¼, E½NW¼, NE¼SW¼, N½SE¼

East Butte of the Sweet Grass Hills.
T. 36 N., R. 4 E., PMM.
Section 13: NW¼NE¼, W½
24: Lots 1-4, N½NE¼, SW¼NE¼, NE¼NW¼
25: Lots 1, 2, 4, 6, E½NE¼
36: Lots 1-3, 5

T. 36 N., R. 5 E., PMM.
Section 6: SE¼NE¼, E½SE¼
7: E½
8: W½SW¼
17: W½W½
18: N½NE¼
19: Lots 2-9, PATENT 20510, PATENT 20511, SE¼SW¼
20: Lots 1-5, PATENT 20511, W½NE¼, SE¼NE¼, NW¼, NW¼SE¼
29: Lots 1-5, 8-10, SW¼NW¼, N½SW¼, SW¼SW¼
30: Lots 1-4, S½NE¼, E½W½, SE¼
31: Lot 1, E½NE¼, NW¼NE¼, NE¼NW¼
32: Lots 1-3, E½NE¼, SW¼NE¼

TOTAL 4,760 Acres

Middle Butte of the Sweet Grass Hills

T. 36 N., R. 3 E., PMM
Section 29: SW¼NE¼, S½NW¼, SW¼, W½SE¼, NE¼SE¼
30: SE¼SE¼
31: NE¼NE¼
32: NW¼NE¼, N½NW¼

TOTAL 600 Acres

ACEC Total Federal Surface Acres 7,952

APPENDIX 3.4

HARDROCK MINERAL DEVELOPMENT POTENTIAL CRITERIA

Criteria	Score
1. Geologic conditions (structure, stratigraphy, mineralogy, geologic province, etc.) favorable for mineral occurrence.	1
2. Historic mining district with past exploration, development or production. May be indicated by patented claims, old workings, or production records.	1
3. Recent mineral locating, staking, leasing or property acquisition activity.	1
4. Recent exploration activity (drilling, sampling, geochemical, geophysical, etc.)	1
5. Anamalous mineral concentrations present, or strongly indicated; either significant in extent or intensity that may warrant further investigation (ore deposit not necessarily defined).	2
6. The mineral of interest indentified has a current or potential market.	2
7. An ore deposit has been identified (economically/technically extractable).	3
8. Area contains ore reserves associated with an existing, operating mine.	3
TOTAL POSSIBLE	14

DEVELOPMENT POTENTIAL RATING

Category	Total Score
None/Unknown	0
Low	1 to 4
Moderate	5 to 8
High	9 to 14

Solid mineral development potential was assessed using data collected from various sources, including; publications, company exploration programs, field observations and BLM records. Individual parcels of land were then evaluated using the eight criteria listed in this appendix. Development potential boundaries were drawn along the smallest legal subdivisions allowed by the data. Attention was focused on those areas where BLM is the surface managing agency. Areas of private surface/federal minerals, or private surface/private minerals are included when it would be inconvenient not to do so.

Some facts should be noted when discussing mineral development potential. It is not the same as occurrence potential which predicts the likelihood for the presence of the mineral without necessarily implying whether it can be economically exploited. Development potential is an economic determination that is fixed by the specific market conditions, available mining technology and the mineral(s) of interest at the time of the determination. Changes in marketability of a mineral commodity, or an improvement in mining methods, may greatly affect the development potential of an area. Analyzing an area for different mineral commodities may yield different development potentials. For example an area with high development potential for precious metals such as gold and silver may have low, or no, development potential for base metals such as copper and lead. The areas assessed in this document are analyzed using the mineral commodity with the highest level of interest.

Another factor affecting the determination is the availability of geologic data. The development potentials depicted are based on the best readily available data, and are a function of the quality and quantity of that data. As additional data is generated in an area it may necessitate a change in the development potential.

APPENDIX 4.2:
BIOLOGICAL ASSESSMENT
WEST HILINE RESOURCE MANAGEMENT PLAN

INTRODUCTION

This biological assessment for threatened and endangered wildlife species evaluates impacts associated with resource management proposals which are being published in the West HiLine Resource Management Plan (RMP) and Environmental Impact Statement (EIS). This biological assessment is in response to the requirements of Section 7(c) of the Endangered Species Act. The West HiLine Planning Area (see Fig. 1.1) includes the entire Havre Resource Area (Hill and Blaine Counties and that portion of Chouteau County north of the Missouri River) and that portion of the Great Falls Resource Area located in Glacier, Toole and Liberty Counties. Small portions of the Judith Resource Area in Fergus County and the Phillips Resource Area in Phillips County were included in this project when management of the Upper Missouri National Wild and Scenic River (UMNWSR) Corridor, and its related lands became an issue in this RMP.

The planning area is located in the north central portion of Montana. It is bounded on the north by Canada, on the east by the Phillips Resource Area, on the south by the Judith Resource Area and on the west by Glacier National Park.

The planning area encompasses 11,285,024 acres, of which 626,098 surface acres (5.5%) and 1,328,014 subsurface acres are administered by the BLM. The majority of landownership is private. Other significant landownerships include the Blackfeet, Rocky Boys and Fort Belknap Indian Reservations, small portions of Glacier National Park, and the Lewis and Clark National Forest, and some state lands. Table 1.1 in the draft RMP EIS portrays the ownership by resource area within the planning area.

This plan only covers the management of public lands administered by the BLM. It does not affect private lands or lands administered by other federal agencies, within the planning area. The West HiLine RMP will provide a comprehensive framework for managing public land and resources administered by the Bureau of Land Management during the next ten or more years. The RMP contents are primarily focused on resolving five key resource management issues. These issues are:

1. Land Tenure Management
2. Off-Road Vehicle Management
3. Right-of-Way Location
4. Emphasis Areas, Kevin Rim, Sweet Grass Hills and Cow Creek
5. Upper Missouri National Wild and Scenic River Management

Four alternatives are presented for analysis within the RMP. Alternative A represents the No Action or Continuing Current Management Alternative; Alternative B presents a combination of management guidance and actions that would favor the use of public land resources; Alternative C presents a combination of management guidance and actions which favors the protection and preservation of public land resources and Alternative D presents a balance of management guidance and actions proposed in the previous three alternatives.

Each alternative combined with the Management Common to All Alternatives guidance will provide management direction for all resources.

AFFECTED SPECIES

According to a letter from the U. S. Fish and Wildlife Service (FWS) dated February 20, 1987, the following listed threatened and endangered (T&E) species may be present in the project area.

Listed Species	Status	Expected Occurrence
Black-footed Ferret (Mustela nigripes)	Endangered	Possible resident of prairie dog towns.
Bald Eagle (Haliaetus leucocephalus)	Endangered	Migration, wintering
Peregrine Falcon (Falco peregrinus)	Endangered	Migration
Piping Plover (Charadrius melodus)	Threatened	Possible resident

A brief description of the occurrence of these species can be found on pages 51-52 in the Draft RMP/EIS. No black-footed ferrets are known to occur in the project area. Approximately, 36 prairie dog towns have been identified in the area, most being isolated and less than forty acres. These do not occur in complexes and probably lack an adequate prey base for ferrets. Only one dog town in Blaine County may contain an adequate prey base; it is approximately six hundred and twenty five acres, one hundred of which occur on public land. However, no ferrets or ferret sign was found on winter surveys conducted in 1982 and 1986. No intensive summer inventories have been made.

Bald eagles are a fairly common migrant and wintering bird. They occur throughout the project area during fall and spring migration. The earliest fall observation date on record in the area is October 4th, while the latest spring date is May 11. No eagle nesting is known to occur. Wintering eagles have been observed primarily along major rivers where open water provides fish and waterfowl as food sources. Most winter observations occur along the Missouri River between the Judith River and Fort Benton, and along the Marias River. Potential nesting habitat is present along the Missouri and Marias Rivers. The adjacent Charles M. Russell Refuge contains no known nesting bald eagles (Haglan, 1987).

Peregrine falcons have been an occasional spring and fall migrant in the project area. Several historic eyries are identified within the project area. These were surveyed in 1985 and 1986 by Chris Hoff and no peregrines were found. Reported historic sites occur along the lower Marias and Missouri Rivers and Kevin Rim. The Marias River site contained good nesting substrate, but only one pair of prairie falcons were observed (Day, 1987). Potential nesting sites are present along the Missouri River, particularly in the White Cliffs area. Prairie falcons currently nest along the Missouri River. Two sites along the river in the CMR refuge were identified as reintroduction sites for peregrines (Endersen, 1978). West Butte in the Sweet Grass Hills and Kevin Rim have also been identified as possible reintroduction sites.

The piping plover was recently (January 10, 1986) listed as threatened in the project area. No sightings have been made within the RMP area, but no intensive inventories have been completed. This species could be a resident, occurring on lake shorelines or on gravel bars or sandy beaches along major rivers. Sightings and nesting of the piping plover has occurred at Fort Peck Lake and Nelson Reservoir, east of the RMP area.

MANAGEMENT COMMON TO ALL ALTERNATIVES

This section of the RMP/EIS gives guidelines for future management practices and will be combined with the selected alternative to serve as the RMP. These are taken from previous planning efforts which include the Missouri Breaks Grazing EIS, Prairie Potholes Vegetation Allocation EIS, Lewistown District Oil and Gas Programmatic Environmental Assessment, Lewistown District Forestry Sales Programmatic Environmental Assessment, Missouri Breaks Wilderness Suitability EIS, Lewistown District Wildlife Habitat Programmatic Environmental Assessment, and Management Framework Plans for Triangle, Blaine and South Bearpaw. Guidance which pertains directly to T&E species can be found on pages 33-39 in Chapter 2 and in Appendix 2.9 of the draft West HiLine RMP. This guidance will also be used to manage other actions taken on BLM administered lands such as vegetation manipulation, oil and gas development, reservoir construction, etc. This guidance is as follows:

1. The BLM will maintain and enhance habitat for all species of wildlife. The emphasis for habitat maintenance and development will be placed on present or potential habitat for sensitive, threatened and/or endangered species, nesting waterfowl, fisheries and crucial big game winter ranges.

2. No action will be initiated on public lands which will jeopardize any federally listed threatened and endangered (T&E) plant or animal. Impacts to other sensitive species and state designated species of special interest will be evaluated and negative impacts mitigated prior to the initiation of any action on public lands.

3. The BLM will work with the U. S. Fish and Wildlife Service (USFWS) on a threatened and endangered species reintroduction effort. The species of interest are the bald eagle, peregrine falcon and piping plover and black-footed ferrets.

4. The BLM will consult with the USFWS when any action may affect a threatened or endangered species per the Endangered Species Act (ESA).

5. Surface uses may be controlled or excluded within a quarter-mile to three mile zone of identified essential habitat of federal and state listed threatened, endangered and sensitive species. At the present time this stipulation will be primarily applied to raptor species.

6. Currently there are no known occupied peregrine falcon aeries in the area; however, historical and potential nest sites are known for the Kevin Rim, Marias and Missouri River Corridors and the West Butte of the Sweet Grass Hills. The BLM will adhere to the approved recovery plan and guidance from the Montana Peregrine Falcon Working Group, in the event a peregrine falcon is found or introduced.

Decision - No Effect

Rationale - These six factors provide for enhancing habitats, mitigation of negative impacts including those actions on BLM lands such as vegetation manipulation, oil and gas development, reservoir construction, etc., consultations with U.S. Fish and Wildlife Service per the Endangered Species Act, and guidance given in recovery plans, thus, providing the necessary habitats and/or protection for T&E species.

ISSUE ANALYSIS

This analysis will be divided into five issue areas as they are presented in Chapter 2, pages 78-90 of the Draft RMP/EIS.

LAND TENURE ADJUSTMENT

Proposed Action: BLM would achieve a public land base which consolidates public holdings in areas containing high value resources. Approximately 15,664 acres would be available for disposal through exchange, the Recreation and Public Purposes Act, and/or sale. An additional 34,428 acres would be available for exchange only. These lands do not meet Federal Land Policy Management Act (FLPMA) sale criteria, but have resource values which may be managed in private ownership or possess moderate resource values which might be exchanged for higher resource values in the area. The BLM would pursue land acquisitions in areas under special management such as the Upper Missouri Wild and Scenic River (UMNWSR), Wilderness Study Areas (WSA), Areas of Critical Environmental Concern (ACEC), and in concentrated public land areas with high resource values.

Decision - No Effect

Rationale - All land adjustments require that an Environmental Assessment/Land Report be prepared, as well as a feasibility report. These assessments will evaluate all the resource values being lost and/or gained. This requires that an assessment of the T&E habitat must be made. According to Appendix 1.1, threatened and endangered species habitat are classified as retention areas. These areas are lands which should be retained in long-term public ownership. Likewise, threatened and endangered species habitat are priority for acquisition. Priority areas include bald eagle historic nesting areas with continuing potential, active nesting sites, and documented roosting and wintering areas and active peregrine falcon nest sites and suitable sites for eagle and peregrine reestablishment. Existing and potential nesting areas for sensitive raptor species are also priority for acquisition. In the event T&E species could be affected, the BLM will formally consult the FWS to render an opinion and offer potential alternatives.

OFF-ROAD VEHICLE USE

Proposed Action: The BLM would provide for public off-road vehicle use while protecting the resource values and providing for public safety. The BLM would limit off-road vehicle use to designated roads and trails in the UMNWSR Corridor. Travel would be limited to existing roads and trails in WSAs, Cow Creek, Kevin Rim and Sweet Grass Hills ACECs and in important riparian areas. BLM would limit off-road vehicles seasonally in: elk and deer crucial winter and calving/fawning areas, antelope crucial range, raptor nesting areas and sedimentary Breaks type soils. The Slat road between the cabins and the Missouri River would be closed to vehicular use. Any area designated for intensive ORV use would be located at least one-quarter mile from raptor nest sites, one and one-half miles from known grouse leks, one-half mile from known bald eagle nests and one mile from active peregrine falcon nests.

Decision - No Effect

Rationale - The restrictions placed on ORV use are designed to protect a variety of resource values, including wildlife and T&E species. Should any areas be designated for intensive ORV use, T&E species habitat would be protected from disturbance. Current and expected ORV use in the project area during the life of the RMP should be very light and impacts to the T&E species should be minor. Should ORV use become a problem in areas sensitive to T&E species, protective restrictions would be placed on any further use. If this did not eliminate the problem, the FWS would be formally consulted on possible alternatives.

RIGHT-OF-WAY

Proposed Action: BLM would permit rights-of-way, provided the impacts can be mitigated. Areas under special management or having important, sensitive resources would be avoidance areas. Wild segments of the UMNWSR and other nationally designated areas for natural or cultural values would be exclusion areas. Corridors would be established ½ mile either side of existing major facilities. These corridors are the preferred locations for the new rights-of-way. Communication sites would be excluded from West Butte in the Sweet Grass Hills.

Decision - No Effect

Rationale - Any right-of-way requires that an Environmental Assessment/Land Report be prepared. These assessments will evaluate all the resource values being lost and those being gained, and types of mitigating measures needed. This requires that an assessment of T&E habitat must be made. In the event T&E species could be affected, BLM will formally consult with USFWS to render an opinion and offer potential alternatives.

SPECIAL MANAGEMENT AREAS - KEVIN RIM

Proposed Action:

The BLM would use the following guidance to prepare an activity plan detailing specific management of the area. The Rocky Mountain Front raptor guidelines in Appendix 2.9 would be used to determine buffer zones and timing windows for activities in the area. These guidelines would be applied to any new activity which threatens to disrupt the nesting and rearing cycles of state or federal sensitive raptor species using the rim. These guidelines would be issued as standard stipulations to all new oil and gas leases in the area. In addition, BLM would use the guidelines to develop stipulations for new development on existing oil and gas leases. These guidelines would also be applied to federal mineral development within the management zone.

The BLM would inventory the Kevin Rim area for cultural resources. Based upon this survey and/or additional surveys the BLM would not authorize projects within ¼ mile of the escarpment unless impacts to the cultural resources could be mitigated.

BLM would encourage ROW off the west side of Kevin Rim. The BLM would authorize new ROWs off the escarpment (east side) along the four established ROW corridors. The BLM would establish a ROW corridor ½ mile on either side of existing ROWs.

Decision - May Affect (Positive)

Rationale - The Rocky Mountain Front raptor guidelines provide for management, protection and maintain/or enhancement of the peregrine falcon habitat. Kevin Rim has a historical aeries, which has not been used in recent time. This site is not a priority reintroduction site, but will be protected and maintained for possible reintroduction at some future date. As a designated ACEC and managed to the direction provided, a management zone would be designated around Kevin Rim to ensure that development of federal minerals under private and state surface, follow the same guidelines implemented on the ACEC. Overall, ACEC designation will provide maximum protection of the significant and relevant resources.

SPECIAL MANAGEMENT AREAS - SWEET GRASS HILLS

Proposed Action: The BLM would use the following guidance to prepare an activity plan detailing the specific management of the area. The area would remain open to mineral entry. Guidelines would be developed in the activity plan to attempt to resolve future conflicts between Native American religious concerns. The BLM would consult with Native American tribes prior to authorizing disturbance in the area. The BLM would apply the raptor guidelines in Appendix 2.9 to all new mineral leases and to new development on existing mineral leases within the ACEC and management zone to protect state and federal sensitive species. Allotment management plans in the ACEC would be revised to emphasize the maintenance and/or improvement of elk winter habitat. This may be accomplished through season of use modification, pasture modification, temporary exclosures, etc.

The BLM would review and recommend revoking the Bureau of Reclamation withdrawal on 529.67 acres on the East Butte. This parcel would then be managed under the guidance for the ACEC.

Decision - May Effect (Positive)

Rationale - The ACEC designation will provide guidelines for management, protection, and maintain/or enhancement of the peregrine falcon habitat. Raptor guidelines would be applied to all new mineral leases, new development on existing mineral leases within the ACEC and management zones to protect state and federal sensitive species.

The south facing cliff of West Butte, in the Sweet Grass Hills would be a primary hacking site, within the planning area, for the peregrine falcon. This site will be protected and maintained for possible reintroduction in the future.

Overall, ACEC designation will provide maximum protection of the significant and relevant resources in the Sweet Grass Hills.

SPECIAL MANAGEMENT AREAS - COW CREEK

Proposed Action: The BLM would provide maximum protection of the significant (historical and recreational) and relevant resources in the Cow Creek area. The area would be designated as an ACEC to protect, maintain, and/or enhance the Nez Perce Trail, Cow Island Trail, and other resources in the corridor. The BLM would prepare an activity plan providing guidance to preserve scenic, cultural, interpretive, recreation and paleontological values. The BLM would reevaluate and adjust the visual management rating in the corridor. The BLM would manage the area with a strong emphasis on riparian management. Existing livestock allotment management plans would be revised to incorporate grazing management practices which would improve riparian community conditions. Emphasis would be given to discourage or prevent livestock congregation along the bottoms. Any future right-of-way grant would be based on valid, existing rights within the corridor. All such developments would be subject to strict visual and reclamation stipulations.

Decision - No Effect

Rationale - No known T&E species habitat occurs in the Cow Creek area. However, an intensive inventory, other than black-footed ferrets has not been conducted. The BLMs plans to protect historical and recreational resources should have little or no impact on T&E species. Improved riparian conditions could increase the potential for bald eagle occurrence. Interpretation of historical values along the corridor would be limited with very little habitat disturbance occurring. Overall, resource protection would probably increase following the ACEC designation.

UPPER MISSOURI NATIONAL WILD AND SCENIC RIVER (UMNWSR)

The BLM would provide recreational opportunities and visitor services consistent with the Wild and Scenic Rivers Act. Future developments would also mitigate negative impacts to the natural and cultural resources. Mitigation measures would be determined after a site specific evaluation. The BLM would provide for all uses in riparian areas which would maintain or improve riparian condition. Recreational and livestock use of islands would not be permitted from April - May 15 during deer fawning and waterfowl brood rearing times.

The BLM would continue to maintain the undeveloped campsites by clearing brush, maximum one-quarter acre, for campsite locations and removing trash left at these areas. All undeveloped sites in the recreational and scenic section of the river would be signed. The BLM would maintain all semi-developed sites. New capital improvements would be allowed if impacts could be mitigated. Improvements in the wild section would be allowed if the developments can be serviced by existing roads or by river. The BLM would restrict developed sites to the recreational segments of the river. Such sites would only be established after a need and economic feasibility report has concluded the site is in the best interest of the public.

The BLM would continue to manage state campsites under the Memorandum of Understanding with Montana Department of Fish, Wildlife and Parks. These sites would be managed under BLM management guidance for the river as presented in the RMP.

Major concession developments would be restricted to the recreational segments of the river. The BLM would allow limited private sector initiatives in campground maintenance and development. The BLM would permit outfitters, guides and boat rental within/upon the river.

Decision - No Effect

Rationale - Management of UMNWSR would be similar to what is currently taking place, with some minor changes. Maintenance of campgrounds, both undeveloped and developed would have minor impacts to T&E species. Maintenance activities could temporarily displace or disturb T&E species along the river. Since no bald eagle or peregrine falcon nest sites are known to currently occur along the river, nesting disturbances should not occur. Federal actions undertaken in the UMNWSR would be subject to the guidance listed in Management Common to All Alternatives and listed on page 3 of this assessment. New campgrounds could be constructed if increased visitor use warranted it. Impacts to T&E species would be considered through an environmental assessment. Use of outfitters would be restricted to 30% of the daily user capacities. Areas of geological, historical, cultural, paleontological and natural area sites would be developed for self-guided interpretive study. This would cause little or no impact to T&E habitat, but could cause minor disturbances by increased human activity to T&E species present within the area. This could have a slight negative impact in the White Cliffs area if peregrine falcons are found to be present. Currently, no nesting peregrines are known to occur in these areas. The maintenance and/or improvement of riparian vegetation would help to improve potential habitat for T&E species, especially bald eagles. If any changes in the management of the UMNWSR occurs that potentially effects T&E species and their associated habitat, consultation with the USFWS would occur.

CUMULATIVE IMPACTS

The West HiLine RMP provides necessary commitments by BLM to insure that proposed site-specific actions covered by this plsn are evaluated for impacts which "may affect" T&E species, including formal snd informal consultation with the FWS whenever necessary. The actions considered in the RMP including other actions taken on BLM administered lands such as vegetation manipulation, oil and gas development, reservoir construction, and those sctions continuing or anticipsted on private and state lands such as farming, timber harvest, and reservoir construction do not jeopardize any T&E species at this point in time. The only anticipated major project during the life of this plan is the Bureau of Reclamation's Missouri to Milk River Water Diversion (MRWD). The RMP and MRWD should not present any cumulative impacts on T&E species.

This agency's opinion, considering the above five issues and guidance for Management Common to All Alternatives, is that there is "no effect" on T&E species for the proposed action.

REFERENCES CITED

Day, Tad 1987 Personal Communication

Endersen, J.H. 1978. Field Report - Survey of Falcon Habitat on the Charles M. Russell National Wildlife Refuge, 22-24, May 1978, 4pp.

Haglan, Bill, 1987. Personal Communication

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Meets Disposal Criteria
(Alternative B, C, & D)

Adjustment Lands
(Alternative B — Available for Disposal)
(Alternative C — Would be Retained)
(Alternative D — Available for exchange)

Emphasis Area

Areas in which preferred acquisition would be of interest

Upper Missouri National Wild & Scenic River Corridor

LAND TENURE

ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D - PROPOSED
A more manageable land pattern would be attained through disposal by exchange or sale. 50,117 acres appear to meet FLPMA criteria for land adjustment through exchange and sale. Acquisitions would be concentrated in areas with large federal holdings.	BLM would retain the majority of the public lands. 15,689 acres would be available for disposal through exchange or sale. Acquisitions would be concentrated in special management and high value resource areas.	BLM land adjustment actions would consolidate high value resource lands. 15,689 acres meet FLPMA criteria for disposal through exchange or sale; 34,428 would be used for disposal by exchange, or by sale if they meet the sale criteria under FLPMA, for lands with higher resource values. Acquisition would be concentrated in special management and high value resource areas.
IMPLEMENTATION		
Land adjustment would be achieved primarily by exchange for lands of equal or better values. Acquisition would be concentrated in the Sweet Grass Hills, Kevin Rim, Marias River, UMNWSR Corridor, Cow Creek, the Rocky Mountain Front and important wildlife habitat areas.	Exchange would be the preferred disposal method to acquire lands of equal or greater resource values. Acquisitions would be concentrated in UMNWSR, Kevin Rim, Sweet Grass Hills, Cow Creek, Marias River, North Blaine County and important wildlife habitat areas.	Exchange would be the preferred method of disposal. Acquisitions would be concentrated in UMNWSR, Kevin Rim, Sweet Grass Hills, Cow Creek, Marias River, North Blaine County, important wildlife habitat and other areas within or outside the planning area.
Acreage Available for Disposal by Any Means		
50,117 acres	15,689 acres	15,689 acres
Exchange		
		34,428 acres

SWEET GRASS HILLS
WEST BUTTE
MIDDLE BUTTE
EAST BUTTE
KEVIN RIM
Great Falls Resource Area
Havre Resource Area
BLACKFEET INDIAN RESERVATION
GLACIER
TOOLE
LIBERTY
HILL
BLAINE
FORT BELKNAP INDIAN RESERVATION
JUDITH RESOURCE AREA
PHILLIPS RESOURCE AREA
COW CREEK
UPPER MISSOURI NATIONAL WILD AND SCENIC RIVER
Glacier National Park
Lewis & Clark National Forest
Cut Bank
Shelby
Browning
HAVRE
Chinook
Harlem
Fort Belknap Agency
Fort Benton
Lonesome Prairie
Big Sandy
Rocky Boy Indian Reservation
Malta
Glasgow
Wolf Point
Hays
Lodge Pole

Scale
1:500,000
10 5 0 10 20 30 40 Miles
10 5 0 10 20 30 40 50 Kilometers

1 inch equals approximately 8 miles

Location Map

MAP 3
LAND TENURE ADJUSTMENT
(Alternative B,C,D)

West HiLine
Resource Management Plan
Environmental Impact Statement
1987

OFF-ROAD VEHICLE MANAGEMENT

	Alternative A	Alternative B	Alternative C	Alternative D (Proposed)
	Wilderness study areas and sedimentary breaks soils with slopes greater than 30% would remain designated "limited" for ORV use.	The BLM would maximize ORV use. WSAs would be designated "limited" areas.	Limited yearlong restrictions would apply to WSAs, ACECs, UMNWSR, sedimentary break soil areas and riparian areas; seasonal restrictions would apply in important wildlife areas. The Gist Road would be designated "closed" from the cabins to the river (1/4 mile).	Limited yearlong restrictions would apply to WSAs, ACECs, UMNWSR, and riparian areas; seasonal restrictions would apply in important wildlife areas and areas of sedimentary soils. The Gist Road would be designated "closed" from the cabins to the river (1/4 mile).
IMPLEMENTATION				
	Publish ORV map and sign area.	Publish ORV map and sign WSAs. Designate and manage an intensive ORV use area of about 640 acres using criteria in the document.	Inventory roads, trails, and ways in above areas, publish map of road restrictions for each area. Sign areas.	Inventory roads, trails, and ways in above areas, publish map of road restrictions for each area. Sign areas. An intensive ORV use area of about 640 acres may be designated based on public demand.
ACREAGE DESIGNATED				
Open	477,763	594,068	197,299	197,984
Limited				
Yearlong	148,235	32,000	329,794	130,070
Seasonal	0	0	90,000	298,039
Closed	0	0	5	5

RIGHT-OF-WAY LOCATION

	Alternative A	Alternative B	Alternative C	Alternative D (Proposed)
	The planning area would remain open to linear ROW and communication site location.	The BLM would permit linear ROWs outside the Upper Missouri National Wild and Scenic River Corridor. The river corridor would be designated an avoidance area; windows would be provided through the UMNWSR Corridor. The entire planning area would remain open to communication site location.	The BLM would protect important natural and cultural resources by designating WSAs, the Sweet Grass Hills and Cow Creek ACECs, riparian areas and areas of sedimentary soils as avoidance areas. The UMNWSR and the Kevin Rim would be exclusion areas. Communication sites would not be permitted on the West and Middle Buttes of the Sweet Grass Hills.	The BLM would permit ROWs, subject to mitigation. The following areas would be avoidance areas for ROWs: scenic and recreational segments UMNWSR; ACECs; WSAs; riparian areas and sedimentary breaks areas. Windows would be provided through the UMNWSR Corridor, however the wild sections of the UMNWSR would be exclusion areas. No communication sites would be permitted on West and Middle Buttes.
IMPLEMENTATION				
	BLM would perform environmental review and stipulate necessary mitigating measures prior to authorization.	BLM would perform environmental review of ROW location projects. Mitigation of impacts would meet legal requirements.	BLM would attempt to route ROWs along existing corridors. If a location is in an avoidance area, the environmental analysis must show the disturbance can be fully mitigated.	In the UMNWSR, the BLM would attempt to route new facilities within a one mile corridor along existing facilities. If a ROW must be located in an avoidance area, the environmental analysis must show the disturbance could be adequately mitigated.
ACREAGE DESIGNATED				
Open	626,088	537,945	420,343	421,023
Avoidance	0	88,153	112,945	141,718
Exclusion	0	0	92,810	63,357

- Occupied Corridors (Western Regional Corridor Study — 1986)
- Communication Sites
- Wilderness Study Areas
- ACEC's
- Upper Missouri Wild & Scenic River Corridor
- Use Limited to slopes of 30% or less (Alternative A only)
- Sedimentary Breaks Soils Limited (Yearlong in Alternative C) (Seasonal in Alternative D)
- Wildlife areas not otherwise covered — limited seasonally
- Rights of Way in the Upper Missouri River Corridor

Scale 1:500,000

10 5 0 10 20 30 40 Miles

10 5 0 10 20 30 40 50 Kilometers

1 inch equals approximately 8 miles

Location Map

MAP 4

- OFF-ROAD VEHICLE - -RIGHTS-OF-WAY-

West HiLine

Resource Management Plan

Environmental Impact Statement

1987

U.S. DEPARTMENT OF THE INTERIOR
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
March 3